The latexbug package*

The \LaTeX Team 2017/10/12

This file is maintained by the LATEX Project team. Bug reports can be opened (category latex) at http://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 analyse 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 v1.0d, last revised 2017/10/12.

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 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 IATEX 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)
                          geometry.sty -> Hideo Umeki
(latexbug)
(latexbug)
                              <latexgeometry [at] gmail [dot] com>
(latexbug)
                          footmisc.sty
                          hyperref.sty -> Heiko Oberdiek
(latexbug)
(latexbug)
                              https://github.com/ho-tex/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.

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 comma separated a 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 nontheless).

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 TEX, 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
10 %\OnlyDescription
                         % Comment out for implementation details
11 \begin{document}
     \DocInput{latexbug.dtx}
13 \end{document}
14 (/driver)
```

4 The implementation

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

 $23 \setminus begingroup$

\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).

```
24 \long\def\latexbug@loop #1 = #2 , {% spaces matter 25 \global\@namedef{latexbug@@#1}{#2}% \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* entries, but they need to go to GitHub 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).

```
27 \latexbug@loop
28 %-----
29 latexbug.sty = us ,
30 regression-test = us ,
31 %----- base
32 \text{ alltt.sty} = \text{us},
33 ansinew.def = us ,
34 \text{ applemac.def} = us ,
35 \text{ article.cls} = \text{us},
36 article.sty = us ,
37 ascii.def = us ,
38 bezier.sty = us ,
39 \text{ bk10.clo} = \text{us},
40 \text{ bk11.clo} = \text{us},
41 \text{ bk12.clo} = \text{us},
42 \text{ book.cls} = \text{us},
43 \text{ book.sty} = \text{us},
44 \text{ cp1250.def} = us
45 \text{ cp1252.def} = us ,
46 \text{ cp1257.def} = us ,
47 \text{ cp437.def} = us,
48 \text{ cp437de.def} = \text{us},
49 \text{ cp850.def} = \text{us},
50 \text{ cp852.def} = \text{us},
51 \text{ cp858.def} = \text{us},
52 \text{ cp865.def} = \text{us},
53 \text{ decmulti.def} = us ,
```

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

```
104 \text{ nfssfont.tex} = \text{us},
105 \text{ oldlfont.sty} = us,
106 \text{ omlcmm.fd} = us ,
107 \text{ omlcmr.fd} = us ,
108 \text{ omlenc.def} = us ,
109 \text{ omllcmm.fd} = us ,
110 \text{ omscmr.fd} = us ,
111 \text{ omscmsy.fd} = us ,
112 \text{ omsenc.def} = us ,
113 \text{ omsenc.dfu} = \text{us},
114 omslcmsy.fd = us ,
115 \text{ omxcmex.fd} = us ,
116 omxlcmex.fd = us ,
117 openbib.sty = us ,
118 \text{ ot1cmdh.fd} = us ,
119 \text{ ot1cmfib.fd} = us,
120 \text{ ot1cmfr.fd} = us ,
121 \text{ ot1cmr.fd} = us ,
122 \text{ ot1cmss.fd} = us ,
123 \text{ ot1cmtt.fd} = us ,
124 \text{ ot1cmvtt.fd} = us ,
125 \text{ otlenc.def} = us,
126 \text{ otlenc.dfu} = us ,
127 \text{ otllcmss.fd} = us,
128 \text{ otllcmtt.fd} = us ,
129 \text{ ot2enc.dfu} = \text{us},
130 \text{ ot4enc.def} = us ,
131 \text{ preload.cfg} = \text{us},
132 preload.ltx = us,
133 \text{ proc.cls} = \text{us},
134 \text{ proc.sty} = \text{us},
135 \text{ report.cls} = \text{us},
136 \text{ report.sty} = us ,
137 \text{ sample2e.tex} = \text{us},
138 \text{ sfonts.def} = us ,
139 shortvrb.sty = us ,
140 \text{ showidx.sty} = us,
141 \text{ size10.clo} = \text{us},
142 \text{ size11.clo} = \text{us},
143 \text{ size12.clo} = \text{us},
144 \text{ slides.cls} = \text{us},
145 \; \mathtt{slides.def} \; = \; \mathtt{us} \; \; ,
146 \text{ slides.sty} = \text{us},
147 \text{ small2e.tex} = \text{us},
148 \text{ source2e.tex} = \text{us},
149 syntonly.sty = us ,
150 \text{ t1cmdh.fd} = \text{us},
151 t1cmfib.fd = us,
152 t1cmfr.fd = us,
153 \text{ t1cmr.fd} = \text{us} ,
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154 \text{ t1cmss.fd} = \text{us} ,
155 t1cmtt.fd = us,
156 \text{ t1cmvtt.fd} = \text{us},
157 \text{ tlenc.def} = \text{us} ,
158 \text{ tlenc.dfu} = \text{us},
159 \text{ tlenc.sty} = \text{us},
160 \text{ t1lcmss.fd} = \text{us},
161 \text{ t1lcmtt.fd} = \text{us},
162 \text{ t2aenc.dfu} = \text{us},
163 \text{ t2benc.dfu} = \text{us} ,
164 \text{ t2cenc.dfu} = \text{us},
165 testpage.tex = us ,
166 texsys.cfg = us ,
167 textcomp.sty = us ,
168 tracefnt.sty = us ,
169 \text{ ts1cmr.fd} = \text{us},
170 \text{ ts1cmss.fd} = \text{us},
171 \text{ ts1cmtt.fd} = \text{us},
172 \text{ ts1cmvtt.fd} = \text{us},
173 \text{ tslenc.def} = us ,
174 \text{ tslenc.dfu} = \text{us},
175 \text{ ucmr.fd} = \text{us},
176 \text{ ucmss.fd} = \text{us},
177 \text{ ucmtt.fd} = \text{us},
178 \text{ ulasy.fd} = \text{us},
179 \text{ ullasy.fd} = \text{us},
180 \; \mathtt{utf8-test.tex} \; = \; \mathtt{us} \; ,
181 \text{ utf8.def} = \text{us},
182 \text{ utf8enc.dfu} = \text{us},
183 \text{ utf8test.tex} = \text{us},
184 \text{ x2enc.dfu} = \text{us},
185 %----- tools
186 afterpage.sty = us ,
187 array.sty = us ,
188 \text{ bm.sty} = \text{us},
189 \text{ calc.sty} = \text{us},
190 dcolumn.sty = us ,
191 delarray.sty = us ,
192 \text{ e.tex} = \text{us},
193 enumerate.sty = us ,
194 \text{ fontsmpl.sty} = \text{us},
195 fontsmpl.tex = us ,
196 ftnright.sty = us ,
197 \text{ h.tex} = \text{us},
198 hhline.sty = us ,
199 indentfirst.sty = us ,
200 layout.sty = us ,
201 longtable.sty = us,
202 \; \text{multicol.sty} = \text{us} ,
203 \text{ q.tex} = \text{us},
```

```
204 \text{ r.tex} = \text{us},
205 \text{ rawfonts.sty} = \text{us},
206 \text{ s.tex} = \text{us},
207 \text{ showkeys.sty} = us,
208 \text{ somedefs.sty} = \text{us},
209 \text{ tabularx.sty} = \text{us},
210 \text{ thb.sty} = \text{us},
211 \text{ thc.sty} = \text{us},
212 \text{ thcb.sty} = \text{us},
213 \text{ theorem.sty} = \text{us},
214 \text{ thm.sty} = \text{us},
215 \text{ thmb.sty} = \text{us},
216 \text{ thp.sty} = \text{us},
217 \text{ trace.sty} = \text{us},
218 \text{ varioref.sty} = \text{us},
219 \text{ verbatim.sty} = us ,
220 \text{ verbtest.tex} = \text{us} ,
221 \text{ x.tex} = \text{us},
222 \text{ xr.sty} = \text{us},
223 \text{ xspace.sty} = \text{us} ,
224 %----- babel (part supported by us)
225 UKenglish.sty = us ,
226 USenglish.sty = us ,
227 afrikaans.sty = us ,
228 \text{ albanian.sty} = us,
229 \text{ american.sty} = \text{us},
230 \text{ austrian.sty} = \text{us},
231 \; \mathsf{babel.def} \; \mathsf{=} \; \mathsf{us} \; \; \mathsf{,}
232 \text{ babel.sty} = \text{us},
233 \text{ bahasa.sty} = \text{us},
234 \text{ bahasam.sty} = \text{us} ,
235 \text{ basque.sty} = \text{us},
236 blplain.tex = us ,
237 \text{ bplain.tex} = \text{us},
238 breton.sty = us ,
239 british.sty = us ,
240 \text{ bulgarian.sty} = \text{us},
241 \text{ catalan.sty} = us,
242 \; {\hbox{croatian.sty}} \; = \; {\hbox{us}} \; \; ,
243 \text{ czech.sty} = \text{us},
244 \text{ danish.sty} = \text{us},
245 \text{ dutch.sty} = \text{us},
246 \text{ english.sty} = \text{us},
247 	ext{ esperanto.sty} = 	ext{us},
248 estonian.sty = us ,
249 \text{ finnish.sty} = \text{us},
250 \text{ francais.sty} = \text{us},
251 galician.sty = us ,
252 germanb.sty = us ,
253 \text{ greek.sty} = \text{us},
```

```
254 \text{ hebrew.sty} = \text{us},
255 \text{ hyphen.cfg} = \text{us},
256 icelandic.sty = us ,
257 interlingua.sty = us ,
258 \text{ irish.sty} = \text{us},
259 italian.sty = us ,
260 latin.sty = us ,
261 lsorbian.sty = us ,
262 luababel.def = us ,
263 \text{ magyar.sty} = \text{us},
264 \text{ naustrian.sty} = \text{us},
265 \text{ ngermanb.sty} = \text{us},
266 \text{ nil.ldf} = \text{us},
267 \text{ norsk.sty} = \text{us},
268 \text{ plain.def} = \text{us},
269 \text{ polish.sty} = \text{us},
270 \text{ portuges.sty} = \text{us} ,
271 \text{ romanian.sty} = \text{us},
272 \text{ russianb.sty} = \text{us},
273 \text{ samin.sty} = \text{us},
274 \text{ scottish.sty} = \text{us},
275 \text{ serbian.sty} = \text{us},
276 slovak.sty = us ,
277 \text{ slovene.sty} = \text{us},
278 \text{ spanish.sty} = us,
279 \text{ swedish.sty} = us,
280 \text{ switch.def} = \text{us} ,
281 \text{ turkish.sty} = \text{us},
282 \text{ ukraineb.sty} = \text{us},
283 \; {\tt usorbian.sty} \; {\tt =} \; {\tt us} \; ,
284 welsh.sty = us ,
285 xebabel.def = us ,
286 %----- graphics
287 \text{ color.cfg} = \text{us} ,
288 \text{ color.sty} = \text{us},
289 \text{ dvipdf.def} = \text{us},
290 \text{ dvipdfmx.def} = \text{us},
291 \text{ dvips.def} = \text{us},
292 \text{ dvipsnam.def} = \text{us},
293 \text{ dvipsone.def} = \text{us} ,
294 dviwin.def = us ,
295 \text{ emtex.def} = \text{us},
296 \text{ epsfig.sty} = \text{us},
297 graphics.cfg = us ,
298 \text{ graphics.sty} = \text{us},
299 graphicx.sty = us ,
300 \text{ keyval.sty} = \text{us},
301 \, lscape.sty = us ,
302 luatex.def = us,
303 \text{ pctex32.def} = \text{us},
```

```
304 pctexhp.def = us ,
305 pctexps.def = us ,
306 pctexwin.def = us ,
307 pdftex.def = us,
308 \text{ pdftex.def} = \text{us} ,
309 \text{ tcidvi.def} = \text{us},
310 \text{ trig.sty} = \text{us},
311 truetex.def = us ,
312 xetex.def = us ,
313 %----- mfnfss
314 \text{ oldgerm.sty} = \text{us},
315 \text{ ot1panr.fd} = us,
316 \text{ ot1pss.fd} = us ,
317 pandora.sty = us ,
318 \text{ uyfrak.fd} = \text{us},
319 uygoth.fd = us ,
320 \text{ uyinit.fd} = \text{us},
321 \text{ uyswab.fd} = \text{us},
322 %----- amsmath
323 amsbsy.sty = us ,
324 \text{ amscd.sty} = \text{us},
325 \text{ amsgen.sty} = \text{us},
326 amsmath.sty = us ,
327 \text{ amsopn.sty} = \text{us},
328 \text{ amstex.sty} = \text{us},
329 \text{ amstext.sty} = \text{us},
330 \text{ amsxtra.sty} = \text{us},
331 %----- amscls (us?)
332 \text{ amsart.cls} = \text{us} ,
333 \text{ amsbook.cls} = \text{us},
334 \text{ amsbooka.sty} = \text{us},
335 \text{ amsdtx.cls} = \text{us} ,
336 amsldoc.cls = us ,
337 \text{ amsmidx.sty} = \text{us},
338 \text{ amsproc.cls} = \text{us},
339 \text{ amsthm.sty} = \text{us},
340 \text{ upref.sty} = \text{us},
341 %----- amsfonts (us?)
342 \text{ amsfonts.sty} = \text{us} ,
343 \text{ amssymb.sty} = \text{us},
344 \text{ cmmib57.sty} = \text{us},
345 \text{ eucal.sty} = \text{us},
346 eufrak.sty = us ,
347 euscript.sty = us ,
348 \text{ ueuex.fd} = \text{us},
349 \text{ ueuf.fd} = \text{us},
350 \text{ ueur.fd} = \text{us},
351 \text{ ueus.fd} = \text{us},
352 \text{ umsa.fd} = \text{us},
353 \text{ umsb.fd} = \text{us},
```

```
354 %----- psnfss
355 \text{ 8rbch.fd} = \text{us},
356 \text{ 8rpag.fd} = \text{us},
357 \text{ 8rpbk.fd} = \text{us},
358 \, \text{8rpcr.fd} = \text{us},
359 \text{ 8rphv.fd} = \text{us},
360 \text{ 8rpnc.fd} = \text{us},
361 \text{ 8rppl.fd} = \text{us},
362 \text{ 8rptm.fd} = \text{us},
363 \; \texttt{8rput.fd} = \texttt{us} ,
364 \text{ 8rpzc.fd} = \text{us},
365 \text{ avant.sty} = \text{us},
366 bookman.sty = us ,
367 chancery.sty = us ,
368 \text{ charter.sty} = \text{us} ,
369 \text{ courier.sty} = \text{us},
370 \; \text{helvet.sty} = \text{us} ,
371 \text{ mathpazo.sty} = \text{us},
372 \text{ mathpple.sty} = \text{us},
373 \text{ mathptm.sty} = us ,
374 \text{ mathptmx.sty} = us,
375 \text{ newcent.sty} = us,
376 \text{ omlbch.fd} = us,
377 \text{ omlpag.fd} = us,
378 \text{ omlpbk.fd} = us ,
379 \text{ omlpcr.fd} = us ,
380 \text{ omlphv.fd} = \text{us} ,
381 \text{ omlpnc.fd} = us ,
382 \text{ omlppl.fd} = \text{us},
383 \text{ omlptm.fd} = \text{us},
384 \text{ omlptmcm.fd} = \text{us},
385 \text{ omlput.fd} = \text{us} ,
386 \text{ omlpzc.fd} = us ,
387 \text{ omlzplm.fd} = us,
388 \text{ omlzpple.fd} = us ,
389 \text{ omlztmcm.fd} = us ,
390 \text{ omsbch.fd} = \text{us} ,
391 \text{ omspag.fd} = \text{us} ,
392 \text{ omspbk.fd} = \text{us},
393 \text{ omspcr.fd} = us ,
394 \text{ omsphv.fd} = \text{us},
395 \text{ omspnc.fd} = us ,
396 \text{ omsppl.fd} = us ,
397 \text{ omsptm.fd} = us,
398 \text{ omsput.fd} = us ,
399 \text{ omspzc.fd} = us ,
400 \text{ omspzccm.fd} = us ,
401 \text{ omszplm.fd} = \text{us},
402 \text{ omszpple.fd} = \text{us},
403 \text{ omsztmcm.fd} = \text{us} ,
```

```
404 \text{ omxpsycm.fd} = us ,
405 \text{ omxzplm.fd} = us,
406 \text{ omxzpple.fd} = us ,
407 \text{ omxztmcm.fd} = us ,
408 \text{ ot1bch.fd} = \text{us},
409 \text{ ot1pag.fd} = us ,
410 \text{ ot1pbk.fd} = us ,
411 \text{ ot1pcr.fd} = us ,
412 \text{ ot1phv.fd} = \text{us},
413 \text{ ot1pnc.fd} = \text{us},
414 \text{ ot1ppl.fd} = \text{us},
415 \text{ ot1pplj.fd} = us,
416 \text{ ot1pplx.fd} = us ,
417 \text{ ot1ptm.fd} = us,
418 \text{ ot1ptmcm.fd} = us ,
419 \text{ ot1put.fd} = \text{us},
420 \text{ ot1pzc.fd} = \text{us},
421 \text{ ot1zplm.fd} = \text{us},
422 \text{ ot1zpple.fd} = \text{us},
423 \text{ ot1ztmcm.fd} = \text{us},
424 \text{ palatino.sty} = \text{us},
425 \text{ pifont.sty} = \text{us},
426 \text{ t1bch.fd} = \text{us},
427 t1pag.fd = us,
428 t1pbk.fd = us,
429 \text{ t1pcr.fd} = \text{us},
430 \text{ t1phv.fd} = \text{us},
431 \text{ t1pnc.fd} = \text{us},
432 t1ppl.fd = us,
433 \text{ t1pplj.fd} = \text{us},
434 \text{ t1pplx.fd} = \text{us},
435 \text{ t1ptm.fd} = \text{us},
436 \text{ t1put.fd} = \text{us},
437 \text{ t1pzc.fd} = \text{us},
438 \text{ times.sty} = \text{us},
439 \text{ ts1bch.fd} = \text{us},
440 \text{ ts1pag.fd} = \text{us},
441 \text{ ts1pbk.fd} = \text{us},
442 \text{ ts1pcr.fd} = \text{us},
443 \text{ ts1phv.fd} = \text{us},
444 \text{ ts1pnc.fd} = \text{us},
445 \text{ ts1ppl.fd} = \text{us},
446 \text{ ts1pplj.fd} = \text{us},
447 \text{ ts1pplx.fd} = \text{us},
448 \text{ ts1ptm.fd} = \text{us},
449 \text{ ts1put.fd} = \text{us},
450 \text{ ts1pzc.fd} = \text{us},
451 \text{ ufplm.fd} = \text{us},
452 \text{ ufplmbb.fd} = \text{us},
453 \text{ upsy.fd} = \text{us},
```

```
454 \text{ upzd.fd} = \text{us},
455 \text{ utopia.sty} = \text{us},
456 %----- expl3
457 \text{ expl3.sty} = \text{us*},
458 l3sort.sty = us*,
459 13 regex.sty = us*,
460 13tl-analysis.sty = us* ,
461 \text{ xfrac.sty} = \text{us*},
462 xparse.sty = us* ,
463 xtemplate.sty = us* ,
464 xfrac.sty = us* ,
465 xcoffins.sty = us*,
466 xgalley.sty = us* ,
467 13keys2e.sty = us*,
468 expl3-code.tex = ignore ,
469 %----- USEFUL FOR BUG REPORTS
470 blindtext.sty = ignore ,
471 etoolbox.sty = ignore ,
472 lipsum.sty = ignore,
473 %----- EXTERNALLY SUPPORTED
474 %
475 beamer.cls = Joseph Wright
                 \Contact https://github.com/josephwright/beamer/issues ,
477 fontspec.sty = Will Robertson
                 \Contact https://github.com/wspr/fontspec/issues ,
479 geometry.sty = Hideo Umeki
                 \Contact <latexgeometry [at] gmail [dot] com> ,
481 hpdftex.def = ignore ,
482 hluatex.def = ignore ,
483 hxetex.def = ignore ,
484 hyperref.cfg = ignore ,
485 hyperref.sty = Heiko Oberdiek
                 \Contact https://github.com/ho-tex/hyperref/issues ,
487 luatex85.sty = Joseph Wright
                 \Contact https://github.com/josephwright/luatex85/issues ,
489 pd1enc.def = ignore,
490 puenc.def
               = ignore ,
491 \text{ siunitx.sty} = \text{Joseph Wright}
                 \Contact https://github.com/josephwright/siunitx/issues ,
492
493 %----- babel external
494 basque.ldf
                 = Juan M. Aguirregabiria
                    \Contact <http://tp.lc.ehu.es/jma.html> ,
496 belarusian.ldf = Aleksey Novodvorsky, Andrew Shadura
                    \Contact <andrew [at] shadura [dot] me> ,
498 bosnian.ldf
                  = Samir Halilcevic %% Halilevi
                    \Contact <samir [dot] halilcevic [at] fet [dot] ba> ,
500 bulgarian.ldf = Georgi N. Boshnakov
                    \Contact <Georgi Boshnakov [at] manchester [dot] ac [dot] uk> ,
502 croatian.ldf
                  = Ivan Kokan
                     \Contact <ivan [dot] kokan [at] gmail [dot] com> ,
503
```

```
504 estonian.ldf
                    = Jaan Vajakas
                      \Contact < jaanvajakas [at] hot [dot] ee> ,
                    = Daniel Flipo
506 frenchb.ldf
                      \Contact <daniel [dot] flipo [at] free [dot] fr> ,
507
508 \; {\tt friulan.ldf}
                    = Claudio Beccari
                      \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
509
510 georgian.ldf
                    = Levan Shoshiashvili
                      \Contact <shoshia [at] hotmail [dot] com> ,
511
512 austrian.ldf
                    = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
513
514 german.ldf
                    = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
515
                    = Juergen Spitzmueller
516 germanb.ldf
                      \Contact < juergen [at] spitzmueller [dot] org> ,
517
518 naustrian.ldf
                    = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
520 ngerman.ldf
                    = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
521
                    = Juergen Spitzmueller
522 ngermanb.ldf
                      \Contact < juergen [at] spitzmueller [dot] org> ,
524 nswissgerman.ldf = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
526 swissgerman.ldf = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
528 greek.ldf
                    = Guenter Milde
529
                      \Contact <milde [at] users [dot] sf [dot] net> ,
530 magyar.ldf
                    = Peter Szabo %% Pter Szab
                      \Contact <http://www.math.bme.hu/latex/> ,
531
                    = Claudio Beccari
532 italian.ldf
                      \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
                    = Japanese TEX Development Community
534 japanese.ldf
                      \Contact <https://github.com/texjporg/babel-japanese> ,
535
536 latin.ldf
                    = Claudio Beccari
                      \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
538 \; {\tt macedonian.ldf}
                   = Stojan Trajanovski
                      \Contact <stojan [dot] trajanovski [at] gmail [dot] com> ,
                    = Cedric Valmary %% Cdric Valmary
540 \; {\tt occitan.ldf}
                      \Contact <cvalmary [at] yahoo [dot] fr> ,
542 piedmontese.ldf = Claudio Beccari
                      \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
543
544 pinyin.ldf
                    = Werner Lemberg
                      \Contact <wl [at] gnu [dot] org> ,
545
546 \text{ romansh.ldf}
                    = Claudio Beccari
                      \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
547
548 russain.ldf
                    = Igor A [dot] Kotelnikov
                      \Contact <kia999 [at] mail [dot] ru> ,
549
550 serbianc.ldf
                    = Filip Brcic
                      \Contact <br/>brcha [at] users [dot] sourceforge [dot] net> ,
552 spanglish.ldf
                    = J [dot] Luis Rivera
                      \Contact <jlrn77 [at] gmail [dot] com> ,
553
```

```
554 spanish.ldf
                                                                                           = Javier Bezos
                                                                                                \Contact <http://www.texnia.com/contact.html> ,
                                                   556 thaicjk.ldf
                                                                                            = Werner Lemberg
                                                                                                \Contact <wl [at] gnu [dot] org> ,
                                                   557
                                                                                           = Sergiy Ponomarenko
                                                   558 ukraineb.ldf
                                                                                                \Contact <sergiy [dot] ponomarenko [at] gmail [dot] com> ,
                                                   560 vietnamese.ldf = Werner Lemberg
                                                   561
                                                                                             \Contact <wl [at] gnu [dot] org> ,
                                                   562 %----- LAST LINE
                                                   563 {\latexbug@empty} = {} ,
                                                            Keep the data but throw away the loop function.
                                                   564 \endgroup
\latexbug@addtofilelist Save the kernel version of \addtofilelist.
                                                   565 \let\latexbug@addtofilelist\@addtofilelist
                   \latexbug@zzzz Storage for third-party files and those from the LATEX3 set on GitHub.
                   \latexbug@expl 566 \def\latexbug@zzzz{}
                                                   567 \def\latexbug@expl{}
\latexbug@process@table A hook into a convenient place in the document set up: the initialisation 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.
                                                   568 \let\latexbug@process@table\process@table
                                                   569 \ensuremath{\mbox{\sc 0}} \ensuremath{
                                                             \latexbug@process@table
                                                              \ifx\latexbug@zzzz\latexbug@empty
                                                                   \ifx\latexbug@expl\latexbug@empty
                                                   572
                                                   573
                                                                   \else
                                                   574
                                                                       \PackageError{latexbug}%
                                                                           {LaTeX3 file(s)\MessageBreak
                                                   575
                                                   576 \ {\tt MessageBreak}
                                                   577 This test files uses the LaTeX3 file(s)\MessageBreak
                                                   578 \MessageBreak
                                                   579
                                                                           580
                                                                           \latexbug@expl
                                                                           581
                                                                           \MessageBreak
                                                   582
                                                   583 You should report bugs in these packages\MessageBreak
                                                   584\;\mathrm{at} the LaTeX3 GitHub site, \MessageBreak
                                                   585 https://github.com/latex3/latex3/issues\MessageBreak
                                                   586 (Or remove them from your example,\MessageBreak
                                                   587 if they are not necessary to\MessageBreak
                                                   588 exhibit the problem).\MessageBreak
```

to submitting the bug report.\MessageBreak

Otherwise it is likely to be rejected!}%

589 }{Please correct your test file prior

590

591

```
\fi
592
593
     \else
         \PackageError{latexbug}%
594
                       {Third-party file(s)\MessageBreak
595
596 \MessageBreak
597 This test file uses third-party file(s)\MessageBreak
598 \MessageBreak
            599
600
           \latexbug@zzzz
           601
           \MessageBreak
602
603 So you should contact the authors\MessageBreak
604 of these files, not the LaTeX Team!\MessageBreak
605 (Or remove the packages that load\MessageBreak
606 them, if they are not necessary to\MessageBreak
607 exhibit the problem).\MessageBreak
608 \MessageBreak
609 If you think the bug is in core LaTeX\MessageBreak
610 (as maintained by the LaTeX Team) but\MessageBreak
611 \ {\rm these} \ {\rm files} \ {\rm are} \ {\rm needed} \ {\rm to} \ {\rm demonstrate} \backslash {\rm MessageBreak}
612 the problem, please continue and mention\MessageBreak
613 this explicitly in your bug report}{Please correct your test file prior
                         to submitting the bug report.\MessageBreak
614
                         Otherwise it is likely to be rejected!}%
615
616
     \fi
617 }
```

\@addtofilelist \latexbug@iftoplevel First, a test to see if we are at the top level: there's no need to test dependencies 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.

```
618 \def\@addtofilelist#1{%
619 % \show\@currnamestack
     \expandafter\latexbug@iftoplevel\@currnamestack {}\@nil
620
621
     \begingroup
       \xdef\latexbug@x{#1}% TODO: one-level sanitize
622
623
       \expandafter
       \ifx\csname latexbug@@\latexbug@x\endcsname\relax
624
625
         \def\latexbug@y{}%
626
       \else
         \xdef\latexbug@y{\csname latexbug@@\latexbug@x\endcsname}%
627
628
       \ifx\latexbug@y\latexbug@us\else
629
630
         \ifx\latexbug@y\latexbug@usstar
            \begingroup
631
              \let\MessageBreak\relax
632
              \xdef\latexbug@expl{%
633
```

```
634
                                                                                                                                                    \latexbug@expl\latexbug@x
635
                                                                                                                                                    \MessageBreak
                                                                                                                               }%
636
637
                                                                                                              \endgroup
                                                                                         \else
638
                                                                                                            \ifx\latexbug@y\latexbug@ignore\else
639
                                                                                                                                           {\let\MessageBreak\relax
640
                                                                                                                                                            \verb|\def| latexbug@zzzz{\latexbug@zzzz\latexbug@x| }
641
                                                                                                                                                                                \verb|\ifx\latexbug@y\latexbug@empty\else|
642
                                                                                                                                                                                                    \space\space -> \space \latexbug@y\fi
643
                                                                                                                                                                                \label{lem:messageBreak} $$\MessageBreak}% % $$\Colors = \Colors = \Colors
644
645
                                                                                                            \fi
                                                                                         \fi
646
647
                                                                     \fi
                                                                     \verb|\endgroup|
648
                                                 \fi
649
                                                 \verb|\latexbug@addtofilelist{#1}| \\
650
651 \ensuremath{\mbox{\sc def}\mbox{\sc de
                                                \def\next{#1}%
652
                                                \ifx\next\@empty
653
654 }
655 \endinput
656 \langle /package \rangle
```