The latexbug package*

The \LaTeX Team 2019/10/15

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 v1.0g, last revised 2019/10/15.

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 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
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}[2019/10/15 v1.0g 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@usenty{}
18 \def\latexbug@usenty{}
19 \def\latexbug@usenty{}
20 \def\latexbug@usenty{}
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 \text{ ascii.def} = \text{us},
37 bezier.sty = us ,
38 \text{ bk10.clo} = \text{us},
39 \text{ bk11.clo} = \text{us},
40 \text{ bk12.clo} = \text{us},
41 \text{ book.cls} = us,
42 \text{ book.sty} = \text{us},
43 \text{ cp1250.def} = us ,
44 \text{ cp1252.def} = us ,
45 \text{ cp1257.def} = us ,
46 \text{ cp437.def} = us,
47 \text{ cp437de.def} = \text{us},
48 \text{ cp850.def} = us ,
49 \text{ cp852.def} = us ,
50 \text{ cp858.def} = \text{us},
51 \text{ cp865.def} = \text{us},
```

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

```
102 next.def = us ,
103 \text{ nfssfont.tex} = \text{us},
104 \text{ oldlfont.sty} = \text{us},
105 \text{ omlcmm.fd} = us ,
106 \text{ omlcmr.fd} = us ,
107 \text{ omlenc.def} = us ,
108 \text{ omllcmm.fd} = us ,
109 \text{ omscmr.fd} = us ,
110 \text{ omscmsy.fd} = us ,
111 \text{ omsenc.def} = us ,
112 \text{ omsenc.dfu} = \text{us},
113 omslcmsy.fd = us ,
114 \text{ omxcmex.fd} = us ,
115 omxlcmex.fd = us ,
116 openbib.sty = us ,
117 \text{ ot1cmdh.fd} = us,
118 \text{ ot1cmfib.fd} = us,
119 \text{ ot1cmfr.fd} = us ,
120 \text{ ot1cmr.fd} = us ,
121 \text{ ot1cmss.fd} = us,
122 \text{ ot1cmtt.fd} = us ,
123 \text{ ot1cmvtt.fd} = us,
124 \text{ otlenc.def} = us,
125 \text{ otlenc.dfu} = us ,
126 \text{ ot1lcmss.fd} = us,
127 \text{ otllcmtt.fd} = \text{us},
128 \text{ ot2enc.dfu} = \text{us} ,
129 \text{ ot4enc.def} = us ,
130 preload.cfg = us ,
131 preload.ltx = us ,
132 \text{ proc.cls} = \text{us},
133 \text{ proc.sty} = \text{us},
134 report.cls = us ,
135 \text{ report.sty} = us ,
136 \text{ sample2e.tex} = \text{us},
137 \text{ sfonts.def} = us ,
138 shortvrb.sty = us ,
139 \text{ showidx.sty} = us ,
140 \text{ size10.clo} = \text{us},
141 \text{ size} 11.\text{clo} = \text{us},
142 \text{ size} 12.\text{clo} = \text{us},
143 \; \text{slides.cls} = \text{us} ,
144 slides.def = us ,
145 \text{ slides.sty} = \text{us},
146 \text{ small2e.tex} = \text{us},
147 \text{ source2e.tex} = \text{us},
148 	ext{ syntonly.sty} = 	ext{us},
149 \text{ t1cmdh.fd} = us ,
150 \text{ t1cmfib.fd} = \text{us},
151 \text{ t1cmfr.fd} = \text{us} ,
```

```
152 t1cmr.fd = us,
153 \text{ t1cmss.fd} = \text{us},
154 \text{ t1cmtt.fd} = \text{us},
155 t1cmvtt.fd = us,
156 \text{ tlenc.def} = \text{us} ,
157 t1enc.dfu = us ,
158 \text{ tlenc.sty} = \text{us},
159 \text{ t1lcmss.fd} = \text{us},
160 \text{ t1lcmtt.fd} = \text{us},
161 \text{ t2aenc.dfu} = \text{us},
162 \text{ t2benc.dfu} = \text{us},
163 \text{ t2cenc.dfu} = \text{us},
164 testpage.tex = us ,
165 \text{ texsys.cfg} = us ,
166 textcomp.sty = us ,
167 tracefnt.sty = us ,
168 \text{ ts1cmr.fd} = \text{us},
169 \text{ ts1cmss.fd} = \text{us},
170 \text{ ts1cmtt.fd} = \text{us},
171 \text{ ts1cmvtt.fd} = \text{us},
172 \text{ tslenc.def} = \text{us},
173 \text{ ts1enc.dfu} = \text{us},
174 \text{ ucmr.fd} = \text{us},
175 \text{ ucmss.fd} = \text{us},
176 \text{ ucmtt.fd} = \text{us},
177 \text{ ulasy.fd} = \text{us},
178 \text{ ullasy.fd} = \text{us},
179 \text{ utf8-test.tex} = \text{us},
180 \text{ utf8.def} = \text{us},
181 \text{ utf8enc.dfu} = \text{us},
182 \text{ utf8test.tex} = \text{us},
183 \text{ x2enc.dfu} = \text{us},
184 %----- tools
185 \text{ afterpage.sty} = \text{us},
186 array.sty = us ,
187 \text{ bm.sty} = \text{us},
188 \text{ calc.sty} = us ,
189 \text{ dcolumn.sty} = \text{us},
190 \text{ delarray.sty} = \text{us},
191 \text{ e.tex} = \text{us},
192 \text{ enumerate.sty} = \text{us},
193 \; \text{fontsmpl.sty} = \text{us} ,
194 \text{ fontsmpl.tex} = \text{us},
195 ftnright.sty = us ,
196 \text{ h.tex} = \text{us},
197 hhline.sty = us ,
198 indentfirst.sty = us ,
199 layout.sty = us ,
200 longtable.sty = us,
201 \text{ multicol.sty} = \text{us},
```

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

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

```
302 \text{ pctex} 32.\text{def} = \text{us},
303 pctexhp.def = us ,
304 \text{ pctexps.def} = \text{us},
305 pctexwin.def = us ,
306 pdftex.def = us ,
307 pdftex.def = us,
308 \text{ rotating.sty} = us,
309 \text{ tcidvi.def} = \text{us},
310 \text{ trig.sty} = \text{us},
311 truetex.def = us ,
312 \text{ xetex.def} = us ,
313 %----- mfnfss
314 \text{ oldgerm.sty} = us,
315 \text{ ot1panr.fd} = us,
316 \text{ ot1pss.fd} = us,
317 pandora.sty = us ,
318 uyfrak.fd = us ,
319 \text{ uygoth.fd} = \text{us},
320 \text{ uyinit.fd} = \text{us},
321 uyswab.fd = us ,
                   ----- amsmath
322 %-----
323 \text{ amsbsy.sty} = \text{us},
324 \text{ amscd.sty} = \text{us},
325 \text{ amsgen.sty} = \text{us},
326 \text{ amsmath.sty} = \text{us},
327 \text{ amsopn.sty} = \text{us},
328 \text{ amstex.sty} = us,
329 \text{ amstext.sty} = \text{us},
330 \text{ amsxtra.sty} = \text{us} ,
331 %----- amscls (AMS)
332 amsart.cls = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
333 amsbook.cls = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
334 amsbooka.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
335 amsdtx.cls = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
336 amsldoc.cls = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
337 amsmidx.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
338 amsproc.cls = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
339 amsthm.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
340 \text{ upref.sty} = \text{American Mathematical Society } \setminus \text{Contact tech-support [at]} \text{ ams [dot] org}
341 %----- amsfonts (AMS)
342 amsfonts.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
343 \text{ amssymb.sty} = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
344 cmmib57.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
345 eucal.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
346 eufrak.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
347 euscript.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
348 ueuex.fd = ignore ,
349 ueuf.fd = ignore ,
350 ueur.fd = ignore ,
351 \text{ ueus.fd} = \text{ignore},
```

```
352 \text{ umsa.fd} = \text{ignore},
353 umsb.fd = ignore ,
354 %----- psnfss
355 \text{ 8rbch.fd} = \text{us},
356 \, 8 \text{rpag.fd} = \text{us},
357 \text{ 8rpbk.fd} = \text{us},
358 \; \texttt{8rpcr.fd} \; = \; \texttt{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 \; \texttt{8rpzc.fd} \; = \; \texttt{us} \; \; ,
365 \text{ avant.sty} = \text{us},
366 \text{ bookman.sty} = \text{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 mathpple.sty = us ,
373 mathptm.sty = us ,
374 \text{ mathptmx.sty} = \text{us},
375 \text{ newcent.sty} = us,
376 \text{ omlbch.fd} = \text{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} = \text{us} ,
382 \text{ omlppl.fd} = \text{us},
383 \text{ omlptm.fd} = \text{us},
384 \text{ omlptmcm.fd} = us ,
385 \text{ omlput.fd} = us,
386 \text{ omlpzc.fd} = us ,
387 \text{ omlzplm.fd} = us,
388 \text{ omlzpple.fd} = \text{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 omspcr.fd = us ,
394 omsphv.fd = 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} = us ,
404 \text{ omxpsycm.fd} = us,
405 \text{ omxzplm.fd} = us,
406 \text{ omxzpple.fd} = us ,
407 \text{ omxztmcm.fd} = \text{us} ,
408 \text{ ot1bch.fd} = us ,
409 \text{ ot1pag.fd} = \text{us},
410 \text{ ot1pbk.fd} = \text{us} ,
411 \text{ ot1pcr.fd} = \text{us},
412 \text{ ot1phv.fd} = \text{us},
413 \text{ ot1pnc.fd} = us ,
414 \text{ ot1ppl.fd} = us,
415 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} = us ,
421 \text{ ot1zplm.fd} = \text{us},
422 \text{ ot1zpple.fd} = \text{us},
423 \text{ ot1ztmcm.fd} = \text{us},
424 palatino.sty = us ,
425 \text{ pifont.sty} = \text{us},
426 \text{ t1bch.fd} = \text{us},
427 t1pag.fd = us,
428 \text{ t1pbk.fd} = \text{us},
429 \text{ t1pcr.fd} = \text{us},
430 \text{ t1phv.fd} = \text{us},
431 \text{ t1pnc.fd} = \text{us},
432 \text{ t1ppl.fd} = \text{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} = 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 \text{ xparse.sty} = \text{us*},
463 xtemplate.sty = us* ,
464 xfrac.sty = us* ,
465 \text{ xcoffins.sty} = \text{us*},
466 \text{ xgalley.sty} = \text{us*},
467 13keys2e.sty = us*,
468 \text{ expl3-code.tex} = \text{ignore},
469 13deprecation.def = ignore ,
470\ l3backend-dvipdfmx.def = ignore,
471 13backend-dvips.def = ignore ,
472 13backend-dvisvgm.def = ignore,
473 l3backend-pdfmode.def = ignore ,
474\ l3backend-xdvipdfmx.def = ignore,
475 %----- HYPERREF
476 hluatex.def = ignore ,
477 hpdftex.def = ignore ,
478 hxetex.def = ignore ,
479 hyperref.cfg = ignore ,
480 \; \text{hyperref.sty} = \text{LaTeX} \; \text{Team}
                   \Contact https://github.com/latex3/hyperref/issues ,
481
482 \text{ pd1enc.def} = ignore,
483 \; {\tt puenc.def} \qquad = \; {\tt ignore} \; ,
484 %-----
                            ----- USEFUL FOR BUG REPORTS
485 blindtext.sty = ignore ,
486 etoolbox.sty = ignore ,
487 kantlipsum.sty = ignore ,
488 \text{ lipsum.ltd} = ignore,
489 lipsum.sty = ignore ,
490 %----- EXTERNALLY SUPPORTED
491 %
492 beamer.cls = Joseph Wright
                   \Contact https://github.com/josephwright/beamer/issues ,
494 fontspec.sty = Will Robertson
                   \Contact https://github.com/wspr/fontspec/issues ,
496 \text{ geometry.sty} = \text{Hideo Umeki}
                   \Contact < latexgeometry [at] gmail [dot] com> ,
498 luatex85.sty = Joseph Wright
                   \Contact https://github.com/josephwright/luatex85/issues ,
500 siunitx.sty = Joseph Wright
                    \Contact https://github.com/josephwright/siunitx/issues ,
501
```

```
----- babel external
503 basque.ldf
                    = Juan M. Aguirregabiria
                      \Contact <http://tp.lc.ehu.es/jma.html> ,
505 belarusian.ldf
                   = Aleksey Novodvorsky, Andrew Shadura
506
                      \Contact <andrew [at] shadura [dot] me> ,
                    = Samir Halilcevic %% Halilčević
507 bosnian.ldf
                      \Contact <samir [dot] halilcevic [at] fet [dot] ba> ,
508
509 bulgarian.ldf
                    = Georgi N. Boshnakov
                      \Contact <Georgi Boshnakov [at] manchester [dot] ac [dot] uk> ,
510
                    = Ivan Kokan
511 croatian.ldf
                      \Contact <ivan [dot] kokan [at] gmail [dot] com> ,
512
513 estonian.ldf
                     Jaan Vajakas
                      \Contact < jaanvajakas [at] hot [dot] ee> ,
515 frenchb.ldf
                    = Daniel Flipo
                      \Contact <daniel [dot] flipo [at] free [dot] fr> ,
516
517 friulan.ldf
                    = Claudio Beccari
                      \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
518
                    = Levan Shoshiashvili
519 georgian.ldf
                      \Contact <shoshia [at] hotmail [dot] com> ,
520
521 \; {\tt austrian.ldf}
                    = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
522
523 german.ldf
                    = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
524
                    = Juergen Spitzmueller
525 germanb.ldf
                      \Contact < juergen [at] spitzmueller [dot] org> ,
527 naustrian.ldf
                   = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
                    = Juergen Spitzmueller
529 ngerman.ldf
                      \Contact <juergen [at] spitzmueller [dot] org> ,
530
                    = Juergen Spitzmueller
531 ngermanb.ldf
                      \Contact <juergen [at] spitzmueller [dot] org> ,
533 nswissgerman.ldf = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
535 swissgerman.ldf = Juergen Spitzmueller
                      \Contact < juergen [at] spitzmueller [dot] org> ,
537 greek.ldf
                    = Guenter Milde
                      \Contact <milde [at] users [dot] sf [dot] net> ,
538
                    = Peter Szabo %% Péter Szabó
539 magyar.ldf
                      \Contact <http://www.math.bme.hu/latex/> ,
540
541 italian.ldf
                    = Claudio Beccari
                      \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
542
543 \; {\tt japanese.ldf}
                    = Japanese TEX Development Community
                      \Contact <https://github.com/texjporg/babel-japanese> ,
544
545 latin.ldf
                    = Claudio Beccari
                      \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
547 macedonian.ldf
                   = Stojan Trajanovski
548
                      \Contact <stojan [dot] trajanovski [at] gmail [dot] com> ,
                    = Cedric Valmary %% Cédric Valmary
549 occitan.ldf
550
                      \Contact <cvalmary [at] yahoo [dot] fr> ,
551 piedmontese.ldf = Claudio Beccari
```

```
\Contact <claudio [dot] beccari [at] gmail [dot] com> ,
                         552
                                             = Werner Lemberg
                         553 pinyin.ldf
                                               \Contact <wl [at] gnu [dot] org> ,
                         555 romansh.ldf
                                             = Claudio Beccari
                                               \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
                         556
                                             = Igor A [dot] Kotelnikov
                         557 russain.ldf
                                               \Contact <kia999 [at] mail [dot] ru> ,
                         558
                         559 \; \mathtt{serbianc.ldf}
                                             = Filip Brcic
                                               \Contact <br/>brcha [at] users [dot] sourceforge [dot] net> ,
                         560
                                             = J [dot] Luis Rivera
                         561 spanglish.ldf
                                               \Contact <jlrn77 [at] gmail [dot] com> ,
                         562
                         563 spanish.ldf
                                             = Javier Bezos
                                               \Contact <http://www.texnia.com/contact.html> ,
                         565 thaicjk.ldf
                                             = Werner Lemberg
                                               \Contact <wl [at] gnu [dot] org> ,
                         567 ukraineb.ldf
                                             = Sergiy Ponomarenko
                                               \Contact <sergiy [dot] ponomarenko [at] gmail [dot] com> ,
                         568
                         569 vietnamese.ldf = Werner Lemberg
                                               \Contact <wl [at] gnu [dot] org> ,
                                                   ----- LAST LINE
                         572 {\latexbug@empty} = {} ,
                             Keep the data but throw away the loop function.
                         573 \endgroup
                        Save the kernel version of \@addtofilelist.
                         574 \let\latexbug@addtofilelist\@addtofilelist
                         Storage for third-party files and those from the LATEX3 set on GitHub.
         \latexbug@zzzz
         \verb|\latexbug@expl|_{575} \latexbug@zzzz{}|
                         576 \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.
                         577 \let\latexbug@process@table\process@table
                         578 \def\process@table{\global\let\@addtofilelist\latexbug@addtofilelist
                              \latexbug@process@table
                         579
                              \ifx\latexbug@zzzz\latexbug@empty
                         580
                                \ifx\latexbug@expl\latexbug@empty
                         581
                         582
                                \else
                                   \PackageError{latexbug}%
                         583
                                     {LaTeX3 file(s)\MessageBreak
                         584
                         585 \MessageBreak
                         586 This test files uses the LaTeX3 file(s)\MessageBreak
                         587 \MessageBreak
```

\latexbug@addtofilelist

\latexbug@expl

588

589

```
========\MessageBreak
590
591
           \MessageBreak
592 You should report bugs in these packages\MessageBreak
593 at the LaTeX3 GitHub site,\MessageBreak
594 https://github.com/latex3/latex3/issues\MessageBreak
595 (Or remove them from your example,\MessageBreak
596 if they are not necessary to\MessageBreak
597\; {\tt exhibit} the problem).
\MessageBreak
598 }{Please correct your test file prior
                        to submitting the bug report.\MessageBreak
599
600
                        Otherwise it is likely to be rejected!}%
601
       \fi
602
     \else
         \PackageError{latexbug}%
603
                      {Third-party file(s)\MessageBreak
604
605 \MessageBreak
606 This test file uses third-party file(s)\MessageBreak
607 \MessageBreak
            608
609
           \latexbug@zzzz
610
           611
           \MessageBreak
612 So you should contact the authors\MessageBreak
613 of these files, not the LaTeX Team!\MessageBreak
614 (Or remove the packages that load\MessageBreak
615 them, if they are not necessary to\MessageBreak
616 \; {\tt exhibit} \; \; {\tt the \; problem).} \\ {\tt MessageBreak}
617 \MessageBreak
618 If you think the bug is in core LaTeX\MessageBreak
619 (as maintained by the LaTeX Team) but\MessageBreak
620 these files are needed to demonstrate\MessageBreak
621 the problem, please continue and mention\MessageBreak
622 this explicitly in your bug report\MessageBreak
623 (with an explanation why you think so)){Please
                        correct your test file prior
625
                         to submitting the bug report.\MessageBreak
                        Otherwise it is likely to be rejected!}%
626
627
     \fi
628 }
```

\@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.

```
629 \def\@addtofilelist#1{%
630 % \show\@currnamestack
631 \expandafter\latexbug@iftoplevel\@currnamestack {}\@nil
```

```
632
     \begingroup
633
       \xdef\latexbug@x{#1}% TODO: one-level sanitize
634
       \expandafter
       \ifx\csname latexbug@c\latexbug@x\endcsname\relax
635
          \def\latexbug@y{}%
636
       \else
637
          \xdef\latexbug@y{\csname latexbug@@\latexbug@x\endcsname}%
638
       \fi
639
       \verb|\ifx\latexbug@y\latexbug@us\else| \\
640
         \verb|\ifx\latexbug@y\latexbug@usstar| \\
641
            \begingroup
642
              \let\MessageBreak\relax
643
644
              \xdef\latexbug@expl{%
645
                \latexbug@expl\latexbug@x
646
                \MessageBreak
              }%
647
            \endgroup
648
         \else
649
            \ifx\latexbug@y\latexbug@ignore\else
650
651
               {\let\MessageBreak\relax
                 \xdef\latexbug@zzzz{\latexbug@zzzz\latexbug@x
652
                   \ifx\latexbug@y\latexbug@empty\else
653
                     \space\space -> \space \latexbug@y\fi
654
655
                   \MessageBreak}}%
656
            \fi
         \fi
657
       \fi
658
       \endgroup
659
     \fi
660
     \latexbug@addtofilelist{#1}}
661
662 \def\latexbug@iftoplevel #1#2\@nil{%
663
     \def\next{#1}%
664
     \ifx\next\@empty
665 }
666 \endinput
667 (/package)
```