The `latexbug` package[*]

The LaTeX Team

2021/09/25

> 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.

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[*]This file has version number v1.0l, last revised 2021/09/25.

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:

```
\RequirePackage{latexbug}        % <- required first line
                                 %    followed by:
\documentclass{article}          % or some other class
                                 %    followed by:
  ...                            % <- code showing the bug ...
\end{document}
```

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 and footmisc 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
(latexbug)                    <latexgeometry [at] gmail [dot] com>
(latexbug)                footmisc.sty
(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`). 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.

It is also possible that `latexbug` doesn't generate an error, but issues a warning, that it has detected one or more packages, that have their own bug tracker. In that case the report should be made in the bug tracker of that package and not in the LaTeX 2_ε, even if it is a package that is mainted by us!

Other people look these bug tracker to search for known problems and thus it is best if yours is recorded in the right place. Such a warning will look like this (we use `hyperref` as an example):

```
Package latexbug Warning: Special bug tracker!
(latexbug)
(latexbug)                  This test file uses the following file(s)
(latexbug)
(latexbug)                  ==============
(latexbug)                  hyperref.sty  ->  Report at:
(latexbug)                      https://github.com/latex3/hyperref/issues
(latexbug)                  ==============
(latexbug)
(latexbug)                  Please note that these files have their own
(latexbug)                  bug tracker and your issue should therefore
(latexbug)                  be reported in the indicated repository.
(latexbug)
(latexbug)                  If they are not necessary to exhibit the problem,
(latexbug)                  remove them from your example and rerun it,
(latexbug)                  otherwise report the issue in the listed repository.
(latexbug)
(latexbug)                  If different repositories are listed, try to
(latexbug)                  select the most appropriate one (but don't worry
```

too much, if the choice is not clear to you).

> *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 LaTeX it will load a number of files and bug reports that are to be sent to the LaTeX 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}
11     \DocInput{latexbug.dtx}
12 \end{document}
13 ⟨/driver⟩
```

4 The implementation

```
14 ⟨*package⟩
15 \NeedsTeXFormat{LaTeX2e}
16 \ProvidesPackage{latexbug}[2021/09/25 v1.0l Bug-classification]
```

\latexbug@empty   Fixed text used in checking what actions to take with different files.
\latexbug@us
\latexbug@ustar   `17 \def\latexbug@empty{}`
\latexbug@ignore   `18 \def\latexbug@us{us}`
`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 #3, {% spaces matter
24   \global\@namedef{latexbug@@#1}{{#2}{#3}}%
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 or other repositories we suport) entries, but they need to go to a different GitHub repository, so are handled separately (and only show up if there are no third-party packages). For the `latex3/latex3` repository just write `us*`, for others one need to specify the full details, e.g.,

```
    hyperref.sty = us*
                    \Contact https://github.com/latex3/hyperref/issues ,
```

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 and before the comma (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 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 bk10.clo = us ,
41 bk11.clo = us ,
42 bk12.clo = us ,
43 book.cls = us ,
44 book.sty = us ,
45 cp1250.def = us ,
46 cp1252.def = us ,
47 cp1257.def = us ,
48 cp437.def = us ,
49 cp437de.def = us ,
50 cp850.def = us ,
51 cp852.def = us ,
52 cp858.def = us ,
53 cp865.def = us ,
54 decmulti.def = us ,
55 doc-v3beta.sty = us ,
56 doc.sty = us ,
57 docstrip.tex = us ,
58 exscale.sty = us ,
59 fix-cm.sty = us ,
60 fixltx2e.sty = us ,
61 flafter.sty = us ,
62 fleqn.clo = us ,
63 fleqn.sty = us ,
64 fltrace.sty = us ,
65 fontenc.sty = us ,
66 fontmath.cfg = us ,
67 fontmath.ltx = us ,
68 fonttext.cfg = us ,
69 fonttext.ltx = us ,
70 graphpap.sty = us ,
```

```
 71 hyphen.ltx = us ,
 72 idx.tex = 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 latin2.def = us ,
 83 latin3.def = us ,
 84 latin4.def = us ,
 85 latin5.def = us ,
 86 latin9.def = us ,
 87 lcyenc.dfu = us ,
 88 leqno.clo = us ,
 89 leqno.sty = 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 newlfont.sty = us ,
106 next.def = us ,
107 nfssfont.tex = us ,
108 oldlfont.sty = us ,
109 omlcmm.fd = us ,
110 omlcmr.fd = us ,
111 omlenc.def = us ,
112 omllcmm.fd = us ,
113 omscmr.fd = us ,
114 omscmsy.fd = us ,
115 omsenc.def = us ,
116 omsenc.dfu = us ,
117 omslcmsy.fd = us ,
118 omxcmex.fd = us ,
119 omxlcmex.fd = us ,
120 openbib.sty = us ,
```

```
121 ot1cmdh.fd = us ,
122 ot1cmfib.fd = us ,
123 ot1cmfr.fd = us ,
124 ot1cmr.fd = us ,
125 ot1cmss.fd = us ,
126 ot1cmtt.fd = us ,
127 ot1cmvtt.fd = us ,
128 ot1enc.def = us ,
129 ot1enc.dfu = us ,
130 ot1lcmss.fd = us ,
131 ot1lcmtt.fd = us ,
132 ot2enc.dfu = us ,
133 ot4enc.def = us ,
134 preload.cfg = us ,
135 preload.ltx = us ,
136 proc.cls = us ,
137 proc.sty = us ,
138 report.cls = us ,
139 report.sty = us ,
140 sample2e.tex = us ,
141 sfonts.def = us ,
142 shortvrb.sty = us ,
143 showidx.sty = us ,
144 size10.clo = us ,
145 size11.clo = us ,
146 size12.clo = us ,
147 slides.cls = us ,
148 slides.def = us ,
149 slides.sty = us ,
150 small2e.tex = us ,
151 source2e.tex = us ,
152 source2edoc.cls = us ,
153 structuredlog.sty = us ,
154 syntonly.sty = us ,
155 t1cmdh.fd = us ,
156 t1cmfib.fd = us ,
157 t1cmfr.fd = us ,
158 t1cmr.fd = us ,
159 t1cmss.fd = us ,
160 t1cmtt.fd = us ,
161 t1cmvtt.fd = us ,
162 t1enc.def = us ,
163 t1enc.dfu = us ,
164 t1enc.sty = us ,
165 t1lcmss.fd = us ,
166 t1lcmtt.fd = us ,
167 t2aenc.dfu = us ,
168 t2benc.dfu = us ,
169 t2cenc.dfu = us ,
170 testpage.tex = us ,
```

```
171 texsys.cfg = us ,
172 textcomp-2018-08-11.sty = us ,
173 textcomp.sty = us ,
174 tracefnt.sty = us ,
175 ts1cmr.fd = us ,
176 ts1cmss.fd = us ,
177 ts1cmtt.fd = us ,
178 ts1cmvtt.fd = us ,
179 ts1enc.def = us ,
180 ts1enc.dfu = us ,
181 tuenc.def = us ,
182 tulmdh.fd = us ,
183 tulmr.fd = us ,
184 tulmss.fd = us ,
185 tulmssq.fd = us ,
186 tulmtt.fd = us ,
187 tulmvtt.fd = us ,
188 ucmr.fd = us ,
189 ucmss.fd = us ,
190 ucmtt.fd = us ,
191 ulasy.fd = us ,
192 ullasy.fd = us ,
193 utf8-2018.def = us ,
194 utf8.def = us ,
195 utf8enc.dfu = us ,
196 x2enc.dfu = us ,
197 %------------------------------ tools
198 afterpage.sty = us ,
199 array-2016-10-06.sty = us ,
200 array-2020-02-10.sty = us ,
201 array.sty = us ,
202 bm.sty = us ,
203 calc.sty = us ,
204 dcolumn.sty = us ,
205 delarray.sty = us ,
206 e.tex = us ,
207 enumerate.sty = us ,
208 fontsmpl.sty = us ,
209 fontsmpl.tex = us ,
210 ftnright.sty = us ,
211 h.tex = us ,
212 hhline.sty = us ,
213 indentfirst.sty = us ,
214 layout.sty = us ,
215 longtable-2020-01-07.sty = us ,
216 longtable.sty = us ,
217 multicol-2017-04-11.sty = us ,
218 multicol.sty = us ,
219 q.tex = us ,
220 r.tex = us ,
```

```
221 rawfonts.sty = us ,
222 s.tex = us ,
223 shellesc.sty = us ,
224 showkeys.sty = us ,
225 somedefs.sty = us ,
226 tabularx.sty = us ,
227 thb.sty = us ,
228 thc.sty = us ,
229 thcb.sty = us ,
230 theorem.sty = us ,
231 thm.sty = us ,
232 thmb.sty = us ,
233 thp.sty = us ,
234 trace.sty = us ,
235 varioref-2016-02-16.sty = us ,
236 varioref.sty = us ,
237 verbatim.sty = us ,
238 verbtest.tex = us ,
239 x.tex = us ,
240 xr.sty = us ,
241 xspace.sty = us ,
242 %----------------------------- babel (part supported by us)
243 UKenglish.sty = us ,
244 USenglish.sty = us ,
245 afrikaans.sty = us ,
246 albanian.sty = us ,
247 american.sty = us ,
248 austrian.sty = us ,
249 babel.def = us ,
250 babel.sty = us ,
251 bahasa.sty = us ,
252 bahasam.sty = us ,
253 basque.sty = us ,
254 blplain.tex = us ,
255 bplain.tex = us ,
256 breton.sty = us ,
257 british.sty = us ,
258 bulgarian.sty = us ,
259 catalan.sty = us ,
260 croatian.sty = us ,
261 czech.sty = us ,
262 danish.sty = us ,
263 dutch.sty = us ,
264 english.sty = us ,
265 esperanto.sty = us ,
266 estonian.sty = us ,
267 finnish.sty = us ,
268 francais.sty = us ,
269 galician.sty = us ,
270 germanb.sty = us ,
```

```
271 greek.sty = us ,
272 hebrew.sty = us ,
273 hyphen.cfg = us ,
274 icelandic.sty = us ,
275 interlingua.sty = us ,
276 irish.sty = us ,
277 italian.sty = us ,
278 latin.sty = us ,
279 lsorbian.sty = us ,
280 luababel.def = us ,
281 magyar.sty = us ,
282 naustrian.sty = us ,
283 ngermanb.sty = us ,
284 nil.ldf = us ,
285 norsk.sty = us ,
286 plain.def = us ,
287 polish.sty = us ,
288 portuges.sty = us ,
289 romanian.sty = us ,
290 russianb.sty = us ,
291 samin.sty = us ,
292 scottish.sty = us ,
293 serbian.sty = us ,
294 slovak.sty = us ,
295 slovene.sty = us ,
296 spanish.sty = us ,
297 swedish.sty = us ,
298 switch.def = us ,
299 turkish.sty = us ,
300 ukraineb.sty = us ,
301 usorbian.sty = us ,
302 welsh.sty = us ,
303 xebabel.def = us ,
304 %------------------------------ graphics + graphics-def
305 color.cfg = us ,
306 color.sty = us ,
307 dvipdf.def = us ,
308 dvipdfmx.def = us ,
309 dvips.def = us ,
310 dvipsnam.def = us ,
311 dvipsone.def = us ,
312 dvisvgm.def = us ,
313 dviwin.def = us ,
314 emtex.def = us ,
315 epsfig.sty = us ,
316 graphics-2017-06-25.sty = us ,
317 graphics.cfg = us ,
318 graphics.sty = us ,
319 graphicx.sty = us ,
320 keyval.sty = us ,
```

```
321 lscape.sty = us ,
322 luatex.def = us ,
323 pctex32.def = us ,
324 pctexhp.def = us ,
325 pctexps.def = us ,
326 pctexwin.def = us ,
327 pdftex.def = us ,
328 rotating.sty = us ,
329 rotating.sty = us ,
330 tcidvi.def = us ,
331 trig.sty = us ,
332 truetex.def = us ,
333 xetex.def = us ,
334 %----------------------------- mfnfss
335 oldgerm.sty = us ,
336 ot1panr.fd = us ,
337 ot1pss.fd = us ,
338 pandora.sty = us ,
339 uyfrak.fd = us ,
340 uygoth.fd = us ,
341 uyinit.fd = us ,
342 uyswab.fd = us ,
343 %----------------------------- firstaid
344 everysel-ltx.sty = us ,
345 filehook-ltx.sty = us ,
346 %----------------------------- amsmath
347 amsbsy.sty = us ,
348 amscd.sty = us ,
349 amsgen.sty = us ,
350 amsmath-2018-12-01.sty = us ,
351 amsmath.sty = us ,
352 amsopn.sty = us ,
353 amstex.sty = us ,
354 amstext.sty = us ,
355 amsxtra.sty = us ,
356 %----------------------------- amscls (AMS)
357 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 amsbooka.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
360 amsdtx.cls = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
361 amsldoc.cls = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
362 amsmidx.sty = American Mathematical Society \Contact tech-support [at] ams [dot] org ,
363 amsproc.cls = American Mathematical Society \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 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 eucal.sty = American Mathematical Society \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 8rbch.fd = us ,
381 8rpag.fd = us ,
382 8rpbk.fd = us ,
383 8rpcr.fd = us ,
384 8rphv.fd = us ,
385 8rpnc.fd = us ,
386 8rppl.fd = us ,
387 8rptm.fd = us ,
388 8rput.fd = us ,
389 8rpzc.fd = us ,
390 avant.sty = us ,
391 bookman.sty = us ,
392 chancery.sty = us ,
393 charter.sty = us ,
394 courier.sty = us ,
395 helvet.sty = us ,
396 mathpazo.sty = us ,
397 mathpple.sty = us ,
398 mathptm.sty = us ,
399 mathptmx.sty = us ,
400 newcent.sty = us ,
401 omlbch.fd = us ,
402 omlpag.fd = us ,
403 omlpbk.fd = us ,
404 omlpcr.fd = us ,
405 omlphv.fd = us ,
406 omlpnc.fd = us ,
407 omlppl.fd = us ,
408 omlptm.fd = us ,
409 omlptmcm.fd = us ,
410 omlput.fd = us ,
411 omlpzc.fd = us ,
412 omlzplm.fd = us ,
413 omlzpple.fd = us ,
414 omlztmcm.fd = us ,
415 omsbch.fd = us ,
416 omspag.fd = us ,
417 omspbk.fd = us ,
418 omspcr.fd = us ,
419 omsphv.fd = us ,
420 omspnc.fd = us ,
```

```
421 omsppl.fd = us ,
422 omsptm.fd = us ,
423 omsput.fd = us ,
424 omspzc.fd = us ,
425 omspzccm.fd = us ,
426 omszplm.fd = us ,
427 omszpple.fd = us ,
428 omsztmcm.fd = us ,
429 omxpsycm.fd = us ,
430 omxzplm.fd = us ,
431 omxzpple.fd = us ,
432 omxztmcm.fd = us ,
433 ot1bch.fd = us ,
434 ot1pag.fd = us ,
435 ot1pbk.fd = us ,
436 ot1pcr.fd = us ,
437 ot1phv.fd = us ,
438 ot1pnc.fd = us ,
439 ot1ppl.fd = us ,
440 ot1pplj.fd = us ,
441 ot1pplx.fd = us ,
442 ot1ptm.fd = us ,
443 ot1ptmcm.fd = us ,
444 ot1put.fd = us ,
445 ot1pzc.fd = us ,
446 ot1zplm.fd = us ,
447 ot1zpple.fd = us ,
448 ot1ztmcm.fd = us ,
449 palatino.sty = us ,
450 pifont.sty = us ,
451 t1bch.fd = us ,
452 t1pag.fd = us ,
453 t1pbk.fd = us ,
454 t1pcr.fd = us ,
455 t1phv.fd = us ,
456 t1pnc.fd = us ,
457 t1ppl.fd = us ,
458 t1pplj.fd = us ,
459 t1pplx.fd = us ,
460 t1ptm.fd = us ,
461 t1put.fd = us ,
462 t1pzc.fd = us ,
463 times.sty = us ,
464 ts1bch.fd = us ,
465 ts1pag.fd = us ,
466 ts1pbk.fd = us ,
467 ts1pcr.fd = us ,
468 ts1phv.fd = us ,
469 ts1pnc.fd = us ,
470 ts1ppl.fd = us ,
```

```
471 ts1pplj.fd = us ,
472 ts1pplx.fd = us ,
473 ts1ptm.fd = us ,
474 ts1put.fd = us ,
475 ts1pzc.fd = us ,
476 ufplm.fd = us ,
477 ufplmbb.fd = us ,
478 upsy.fd = us ,
479 upzd.fd = us ,
480 utopia.sty = us ,
481 %------------------------------ l3experimental
482 l3benchmark.sty = us* ,
483 l3bitset.sty = us* ,
484 l3draw.sty = us* ,
485 l3graphics.sty = us* ,
486 l3sys-shell.sty = us* ,
487 %------------------------------ l3packages
488 xparse-2018-04-12.sty = us* ,
489 xparse-2020-10-01.sty = us* ,
490 xparse-generic.tex = us* ,
491 xparse.ltx = us* ,
492 xfp.sty = us* ,
493 %------------------------------ l3kernel / expl3
494 expl3-code.tex = ignore ,
495 expl3.ltx  = ignore ,
496 expl3.lua = us* ,
497 expl3.sty  = us* ,
498 l3backend-dvipdfmx.def = ignore ,
499 l3backend-dvips.def = ignore ,
500 l3backend-dvisvgm.def = ignore ,
501 l3backend-luatex.def = ignore ,
502 l3backend-pdfmode.def = ignore ,        % -- old
503 l3backend-pdftex.def = ignore ,
504 l3backend-xdvipdfmx.def = ignore ,      % -- old
505 l3backend-xetex.def = ignore ,
506 l3debug.def = us* ,
507 l3deprecation.def = ignore ,
508 l3doc.cls = us* ,
509 l3docstrip.tex = us ,
510 l3keys2e.sty = us* ,
511 l3str-enc-iso88591.def = us* ,
512 l3str-enc-iso885910.def = us* ,
513 l3str-enc-iso885911.def = us* ,
514 l3str-enc-iso885913.def = us* ,
515 l3str-enc-iso885914.def = us* ,
516 l3str-enc-iso885915.def = us* ,
517 l3str-enc-iso885916.def = us* ,
518 l3str-enc-iso88592.def = us* ,
519 l3str-enc-iso88593.def = us* ,
520 l3str-enc-iso88594.def = us* ,
```

```
521 l3str-enc-iso88595.def = us* ,
522 l3str-enc-iso88596.def = us* ,
523 l3str-enc-iso88597.def = us* ,
524 l3str-enc-iso88598.def = us* ,
525 l3str-enc-iso88599.def = us* ,
526 xcoffins.sty = us* ,
527 xfrac.sty = us* ,
528 xgalley.sty = us* ,
529 xparse.sty = us* ,
530 xtemplate.sty = us* ,
531 %------------------------------ TAGGING PROJECT
532 pdfmanagement-testphase.sty = us*
533                 \Contact https://github.com/latex3/pdfresources/issues
534 pdfmanagement-testphase.ltx = ignore ,
535 %------------------------------ EXTERNAL PACKAGES SUPPORTED BY THE LaTeX Team
536 hluatex.def  = ignore ,
537 hpdftex.def  = ignore ,
538 hxetex.def   = ignore ,
539 hyperref.cfg = ignore ,
540 hyperref.sty = us*
541                 \Contact https://github.com/latex3/hyperref/issues ,
542 hyperref-langpatches.def = ignore ,
543 pd1enc.def   = ignore ,
544 puenc.def    = ignore ,
545 xcolor.sty = us*
546        \Contact https://github.com/latex3/xcolor/issues ,
547 %------------------------------ PACKAGES BY MEMBERS OF THE LaTeX Team
548 beamer.cls   = Joseph Wright
549                 \Contact https://github.com/josephwright/beamer/issues ,
550 dashundergaps.sty = Frank Mittelbach
551                 \Contact https://github.com/FrankMittelbach/fmitex-dashundergaps/issues ,
552 fewerfloatpages.sty = Frank Mittelbach
553                 \Contact https://github.com/FrankMittelbach/fmitex-fewerfloatpages ,
554 fontspec.sty = Will Robertson
555                 \Contact https://github.com/wspr/fontspec/issues ,
556 luatex85.sty  = Joseph Wright
557                 \Contact https://github.com/josephwright/luatex85/issues ,
558 parskip.sty = Frank Mittelbach
559                 \Contact https://github.com/FrankMittelbach/fmitex-parskip/issues ,
560 siunitx.sty  = Joseph Wright
561                 \Contact https://github.com/josephwright/siunitx/issues ,
562 widows-and-orphans.sty = Frank Mittelbach
563                 \Contact https://github.com/FrankMittelbach/fmitex-widows-and-orphans/issues
564 %------------------------------ USEFUL FOR BUG REPORTS
565 blindtext.sty = ignore ,
566 etoolbox.sty = ignore ,
567 kantlipsum.sty   = ignore ,
568 lipsum.ltd   = ignore ,
569 lipsum.sty   = ignore ,
570 %------------------------------ EXTERNALLY SUPPORTED
```

```
571 %
572 geometry.sty = Hideo Umeki
573                 \Contact <latexgeometry [at] gmail [dot] com> ,
574 %----------------------------- babel external
575 basque.ldf       = Juan M. Aguirregabiria
576                 \Contact <http://tp.lc.ehu.es/jma.html> ,
577 belarusian.ldf   = Aleksey Novodvorsky and Andrew Shadura
578                 \Contact <andrew [at] shadura [dot] me> ,
579 bosnian.ldf      = Samir Halilcevic %% Halilčević
580                 \Contact <samir [dot] halilcevic [at] fet [dot] ba> ,
581 bulgarian.ldf    = Georgi N. Boshnakov
582                 \Contact <Georgi Boshnakov [at] manchester [dot] ac [dot] uk> ,
583 croatian.ldf     = Ivan Kokan
584                 \Contact <ivan [dot] kokan [at] gmail [dot] com> ,
585 estonian.ldf     = Jaan Vajakas
586                 \Contact <jaanvajakas [at] hot [dot] ee> ,
587 frenchb.ldf      = Daniel Flipo
588                 \Contact <daniel [dot] flipo [at] free [dot] fr> ,
589 friulan.ldf      = Claudio Beccari
590                 \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
591 georgian.ldf     = Levan Shoshiashvili
592                 \Contact <shoshia [at] hotmail [dot] com> ,
593 austrian.ldf     = Juergen Spitzmueller
594                 \Contact <juergen [at] spitzmueller [dot] org> ,
595 german.ldf       = Juergen Spitzmueller
596                 \Contact <juergen [at] spitzmueller [dot] org> ,
597 germanb.ldf      = Juergen Spitzmueller
598                 \Contact <juergen [at] spitzmueller [dot] org> ,
599 naustrian.ldf    = Juergen Spitzmueller
600                 \Contact <juergen [at] spitzmueller [dot] org> ,
601 ngerman.ldf      = Juergen Spitzmueller
602                 \Contact <juergen [at] spitzmueller [dot] org> ,
603 ngermanb.ldf     = Juergen Spitzmueller
604                 \Contact <juergen [at] spitzmueller [dot] org> ,
605 nswissgerman.ldf = Juergen Spitzmueller
606                 \Contact <juergen [at] spitzmueller [dot] org> ,
607 swissgerman.ldf = Juergen Spitzmueller
608                 \Contact <juergen [at] spitzmueller [dot] org> ,
609 greek.ldf        = Guenter Milde
610                 \Contact <milde [at] users [dot] sf [dot] net> ,
611 magyar.ldf       = Peter Szabo %% Péter Szabó
612                 \Contact <http://www.math.bme.hu/latex/> ,
613 italian.ldf      = Claudio Beccari
614                 \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
615 japanese.ldf     = Japanese TEX Development Community
616                 \Contact <https://github.com/texjporg/babel-japanese> ,
617 latin.ldf        = Claudio Beccari
618                 \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
619 macedonian.ldf   = Stojan Trajanovski
620                 \Contact <stojan [dot] trajanovski [at] gmail [dot] com> ,
```

```
621 occitan.ldf      = Cedric Valmary %% Cédric Valmary
622                      \Contact <cvalmary [at] yahoo [dot] fr> ,
623 piedmontese.ldf = Claudio Beccari
624                      \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
625 pinyin.ldf       = Werner Lemberg
626                      \Contact <wl [at] gnu [dot] org> ,
627 romansh.ldf      = Claudio Beccari
628                      \Contact <claudio [dot] beccari [at] gmail [dot] com> ,
629 russain.ldf      = Igor A [dot]  Kotelnikov
630                      \Contact <kia999 [at] mail [dot] ru> ,                % -- old?
631 serbianc.ldf     = Filip Brcic
632                      \Contact <brcha [at] users [dot] sourceforge [dot] net> ,
633 spanglish.ldf    = J [dot]  Luis Rivera
634                      \Contact <jlrn77 [at] gmail [dot] com> ,               % -- old?
635 spanish.ldf      = Javier Bezos
636                      \Contact <http://www.texnia.com/contact.html> ,
637 thaicjk.ldf      = Werner Lemberg
638                      \Contact <wl [at] gnu [dot] org> ,
639 ukraineb.ldf     = Sergiy Ponomarenko
640                      \Contact <sergiy [dot] ponomarenko [at] gmail [dot] com> ,
641 vietnamese.ldf   = Werner Lemberg
642                      \Contact <wl [at] gnu [dot] org> ,
643 %------------------------------ LAST LINE
644 {\latexbug@empty} = {} ,
```

Keep the data but throw away the loop function.

```
645 \endgroup
```

\latexbug@addtofilelist   Save the kernel version of \@addtofilelist.

```
646 \let\latexbug@addtofilelist\@addtofilelist
```

\latexbug@zzzz   Storage for third-party files and those from the LaTeX3 set on GitHub.
\latexbug@own
```
647 \def\latexbug@zzzz{}
648 \def\latexbug@own{}
```

\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@own have any content then there is a message to issue, it's just a question of deciding which one.

```
649 \let\latexbug@process@table\process@table
650 \def\process@table{\global\let\@addtofilelist\latexbug@addtofilelist
651   \latexbug@process@table
652   \ifx\latexbug@zzzz\latexbug@empty
653     \ifx\latexbug@own\latexbug@empty
654     \else
655       \typeout{}%
656       \PackageWarningNoLine{latexbug}%
657         {Special bug tracker!\MessageBreak
658 \MessageBreak
```

18

```
659 This test file uses the following file(s)\MessageBreak
660 \MessageBreak
661        ==============\MessageBreak
662        \latexbug@own
663        ==============\MessageBreak
664        \MessageBreak
665 Please note that these files have their own\MessageBreak
666 bug tracker and your issue should therefore\MessageBreak
667 be reported in the indicated repository.\MessageBreak
668        \MessageBreak
669 If they are not necessary to exhibit the problem,\MessageBreak
670 remove them from your example and rerun it,\MessageBreak
671 otherwise report the  issue in the listed repository.\MessageBreak
672        \MessageBreak
673 If different repositories are listed, try to\MessageBreak
674 select the most appropriate one (but don't worry\MessageBreak
675 too much, if the choice is not clear to you)}%
676      \typeout{}%
677    \fi
678   \else
679      \PackageError{latexbug}%
680                   {Third-party file(s)\MessageBreak
681 \MessageBreak
682 This test file uses third-party file(s)\MessageBreak
683 \MessageBreak
684        ==============\MessageBreak
685        \latexbug@zzzz
686        ==============\MessageBreak
687        \MessageBreak
688 So you should contact the authors\MessageBreak
689 of these files, not the LaTeX Team!\MessageBreak
690 (Or remove the packages that load\MessageBreak
691 them, if they are not necessary to\MessageBreak
692 exhibit the problem).\MessageBreak
693 \MessageBreak
694 If you think the bug is in core LaTeX\MessageBreak
695 (as maintained by the LaTeX Team) but\MessageBreak
696 these files are needed to demonstrate\MessageBreak
697 the problem, please continue and mention\MessageBreak
698 this explicitly in your bug report\MessageBreak
699 (with an explanation why you think so)}{Please
700                      correct your test file prior
701                      to submitting the bug report.\MessageBreak
702                      Otherwise it is likely to be rejected!}%
703    \fi
704 }
```

\@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.

```
705 \def\@addtofilelist#1{%
706   \expandafter\latexbug@iftoplevel\@currnamestack {}\@nil
707   \begingroup
708     \xdef\latexbug@x{#1}% TODO: one-level sanitize
709     \expandafter
710     \ifx\csname latexbug@@\latexbug@x\endcsname\relax
711       \def\latexbug@y{}%
712     \else
```

`\latexbug@y` will contain either on of the keywords us or us* or ignore or it will contain the start part of the third-party information, `\latexbug@z` contains the rest (if anything), the space between the two is lost and needs to be reinserted.

```
713       \xdef\latexbug@y{\expandafter\expandafter\expandafter
714         \@firstoftwo\csname latexbug@@\latexbug@x\endcsname}%
715       \xdef\latexbug@z{\expandafter\expandafter\expandafter
716         \@secondoftwo\csname latexbug@@\latexbug@x\endcsname}%
717     \fi
718     \ifx\latexbug@y\latexbug@us\else
719       \ifx\latexbug@y\latexbug@usstar
720         \begingroup
721           \let\MessageBreak\relax
722           \xdef\latexbug@own{%
723             \latexbug@own\latexbug@x
724             \space\space -> \space Report at:
725           \ifx\latexbug@z\@empty
726             \Contact https://github.com/latex3/latex3/issues
727           \else
728             \latexbug@z
729           \fi
730             \MessageBreak
731           }%
732         \endgroup
733       \else
734         \ifx\latexbug@y\latexbug@ignore\else
735           {\let\MessageBreak\relax
736             \xdef\latexbug@zzzz{\latexbug@zzzz\latexbug@x
737               \ifx\latexbug@y\latexbug@empty\else
738                 \space\space -> \space \latexbug@y
739                                   \space \latexbug@z
740               \fi
741               \MessageBreak}}%
742         \fi
743       \fi
744     \fi
745     \endgroup
746   \fi
747   \latexbug@addtofilelist{#1}}
```

```
748 \def\latexbug@iftoplevel #1#2\@nil{%
749   \def\next{#1}%
750   \ifx\next\@empty
751 }
752 \endinput
753 ⟨/package⟩
```