

The `latex-lab-firstaid` package

Temporary patches to external packages needed for the tagging project

L^AT_EX Project*
v0.85b 2024-01-21

Abstract

1 Introduction

The followings contains small temporary changes to external packages to avoid errors with the new tagging code.

Similar to the main firstaid package the goal is to remove the patches once the packages have been updated.

2 Implementation

```
1 <*package>
2 <@@=tag>
3 \ProvidesPackage {latex-lab-testphase-firstaid} [%
4   \ltlabfirstaiddate\space v\ltlabfirstaiddate\space
5   Temporary patches to external packages needed for the tagging project]
```

2.1 `ams` classes

The `amsart` and `amsbook` classes do not use `\@author` to store the author list but a command `\authors`. To be able to nevertheless use the authors in the xmp-metadata we map `\@author` to this new command.

```
6 \AddToHook{class/amsart/after}
7   {\def\@author{\authors}}
8 \AddToHook{class/amsbook/after}
9   {\def\@author{\authors}}
```

*Initial implementation done by Ulrike Fischer

2.2 blindtext

The blindtext package generates lists with nested \loop command. The inner loop introduces a group around the list which error when lists are tagged as \@doendpe is lost.

```
10 \AddToHook{file/blindtext.sty/after}[latex-lab-firstaid]{%
11   \FirstAidNeededT{blindtext}{sty}{\blindfiledate\space\blindfileversion\space%
12     blindtext-Package}%
13   {%
14     \renewcommand{\blind@items}{%
15       \setcounter{blind@listcount}{1}%
16       \loop
17       \ifblind@optional
18         \ifblind@long
19           \item[\blindtext@countitem] \blindtext@text
20         \else
21           \item[\blindtext@count] \blindtext@item
22         \fi
23       \else % \blind@optionalfalse
24         \ifblind@long
25           \item \blindtext@text
26         \else
27           \item \blindtext@countitem
28         \fi
29       \fi % \ifblind@optional
30     }%
31     \loop
32     \ifnum\value{blindlistlevel}>\value{blindlist@level}%
33       \stepcounter{blind@levelcount}%
34       \blind@list[\value{blindlist}]\relax
35       \addtocounter{blind@levelcount}{-1}%
36       \setcounter{blind@listcount}{1}%
37     \repeat
38     \expandafter\if@endpe\@doendpe\fi % <-----changed
39     \ifnum\value{blind@listcount}<\value{blindlist}%
40       \stepcounter{blind@listcount}%
41     \repeat
42   }
43 }%
44 }
```

2.3 cleveref

The cleveref package redefines \@makefnmark and this means that the patches in the new footnote code fails. We use a hook instead

```
45 \AddToHook{package/cleveref/after}
46 {
47   \let\@makefnmark\cref@old@makefnmark
48   \AddToHook{cmd/@makefnmark/before}{%
49     \cref@constructprefix{footnote}{\cref@result}%
50     \protected@edef\cref@currentlabel{%
51       [footnote][\arabic{footnote}][\cref@result]%
52     \p@footnote\@thefnmark}}
```

The second problem is that it redefines `\refstepcounter` to use an argument. In itself this isn't a problem but as the new definition doesn't grab the arguments directly it fails over the generic hook inserted at the end of the definition

```
53 \RenewDocumentCommand\refstepcounter{om}{%
54   \IfNoValueTF{#1}%
55     {\refstepcounter@noarg{#2}}%
56     {\refstepcounter@optarg[#1]{#2}}%
57   }%
58 }
59 </package>
60 <!--*latex-lab-->
61 \ProvidesFile{firstaid-latex-lab-testphase.ltx}
62   [\ltxlabfirstaiddate\space v\ltxlabfirstaidversion\space
63     latex-lab wrapper firstaid]
64
65 \RequirePackage{latex-lab-testphase-firstaid}
66
67 </latex-lab>
```