

The `latex-lab-minipage` package

Changes related to the tagging of `minipage` and `parbox`

L^AT_EX Project*

v0.81e 2024-09-18

Abstract

1 Introduction

How to best tag `minipages` and `parboxes` is still under discussion. But as they start and contain paragraphs it is clear that some sockets are needed to interrupt and restart the tagging.

The tagging added is currently quite simple-minded. See the `todo-testfiles` and the code comments for some open points.

One of the main problems is how to properly embed them in the surrounding. When used in normal text (in a paragraph) they typically should close the `text` structure and reopen one at the end. But when used inside low-level `\vbox` or `\hbox` this is often wrong. The code uses now there two sockets `tagsupport/parbox/before` and `tagsupport/parbox/after` which can be set to `noop`, if necessary.

```
1 <*package>
```

2 Implementation

```
2 \ProvidesExplPackage {latex-lab-testphase-minipage}
3   {\l\tlabminipagedate} {\l\tlabminipageversion}
4   {Code related to the tagging of minipages and parboxes}
```

As `minipage` uses a socket from the footnote code we must load the OR-code:

```
5 \RequirePackage{latex-lab-testphase-new-or-1}
6 \RequirePackage{latex-lab-testphase-new-or-2}
```

2.1 Provide the kernel hooks

[kernel?] We need to check/set the status before the initial `\leavevmode` to decide how to handle the structure. Perhaps the same command will work for both?

```
7 \def\@kernel@init@minipage{}
8 \def\@kernel@init@parbox{}
```

*Initial implementation done by Ulrike Fischer

We use sockets for the tag support code, as there will be cases where we want to exchange the content or disable it.

```

9 \socket_new:nn {tagsupport/minipage/before}{0}
10 \socket_new:nn {tagsupport/minipage/after} {0}
11 \socket_new:nn {tagsupport/parbox/before} {0}
12 \socket_new:nn {tagsupport/parbox/after}{0}

```

2.2 Patch minipage

[kernel?] The begin hook is inserted in `\@iiiminipage`

```

13 \def\@iiiminipage#1#2[#3]#4{%

```

Before switching to hmode we insert a hook. It is currently unused but could for example check if we are in vmode and change the following paragraph tag.

```

14 \kernel@init@minipage
15 \leavevmode
16 \@pboxswfalse
17 \setlength\@tempdima{#4}%
18 \def\@mpargs{#{1}#{2}[#3]#{4}}%

```

insert the socket

```

19 \UseTaggingSocket{minipage/before}% new
20 \setbox\@tempboxa\vbox\bgroup
21 \color@begingroup
22 \hsize\@tempdima
23 \textwidth\hsize \columnwidth\hsize
24 \@parboxrestore

```

minipages are perhaps used in environments where the tagging of paragraphs has been altered. So we try to restore this. TODO: this should perhaps be done in `\@parboxrestore` directly.

```

25 \UseTaggingSocket{para/restore}
26 \def\@mpfn{mpfootnote}\def\thempfn{\thempfootnote}\c@mpfootnote\z@
27 \socket_assign_plug:nn{fntext/process}{mp}%
28 \let\@listdepth\@mplistdepth \@mplistdepth\z@
29 \@minipagerestore
30 \@setminipage}

```

And a hook at the end

```

31 \def\endminipage{%
32 \par
33 \unskip
34 \ifvoid\@mpfootins\else
35 \vskip\skip\@mpfootins
36 \normalcolor
37 \footnoterule
38 \unvbox\@mpfootins
39 \fi
40 \@minipagefalse %% added 24 May 89
41 \color@endgroup
42 \egroup

```

As the parbox command is called, we must prevent that it adds its additional tagging commands:

```

43 \tag_suspend:n{minipage}
44 \expandafter\@iiiparbox\@mpargs{\unvbox\@tempboxa}%
45 \tag_resume:n{minipage}
46 \UseTaggingSocket{minipage/after} %new end ...
47 }

```

And similar for \parbox

```

48 \long\def\@iiiparbox#1#2[#3]#4#5{%
49 \@kernel@init@parbox
50 \leavevmode
51 \@pboxswfalse
52 \setlength\@tempdima{#4}%
53 \UseTaggingSocket{parbox/before}
54 \@begin@tempboxa\vbox{\hsize\@tempdima\@parboxrestore

```

parbox are perhaps used in environments where the tagging of paragraphs has been altered. So we try to restore this. TODO: this should perhaps be done in \@parboxrestore directly.

```

55 \UseTaggingSocket{para/restore}
56 #5\@@par}%
57 \ifx\relax#2\else
58 \setlength\@tempdimb{#2}%
59 \edef\@parboxto{to\the\@tempdimb}%
60 \fi
61 \if#1b\vbox
62 \else\if #1t\vtop
63 \else\ifmmode\vcenter
64 \else\@pboxswtrue $\vcenter
65 \fi\fi\fi
66 \@parboxto{\let\hss\vss\let\unhbox\unvbox
67 \csname bm@#3\endcsname}%
68 \if@pboxsw \m@th$\fi
69 \@end@tempboxa%
70 \UseTaggingSocket{parbox/after}
71 }

```

2.3 Tagging commands

```

72 \tl_new:N \l__ltboxes_tag_tl
73 \tl_set:Nn \l__ltboxes_tag_tl {Div}
74 \socket_new_plug:nnn{taggsupport/minipage/before}{tag/dflt}
75 {

```

As there was a \leavevmode before that is a P/text open that we have to close if para tagging is active:

```

76 \tag_mc_end_push:
77 \bool_if:NT \l__tag_para_bool {\tag_struct_end:}

```

TODO: the P can be further up, we need a proper method to test and handle this.

```

78 \tag_struct_begin:n{tag=\l__ltboxes_tag_tl}
79 }

```

similar for the other sockets:

```

80 \socket_new_plug:nnn{taggsupport/minipage/after}{tag/dflt}

```

```

81 {
82   \tag_struct_end:
83   \bool_if:NT \l__tag_para_bool {\tag_struct_begin:n{tag=\l__tag_para_tag_tl}}
84   \tag_mc_begin_pop:n{ }
85 }
86
87 \socket_new_plug:nnn{tagsupport/parbox/before}{tag/dflt}
88 {
89   \tag_mc_end_push:
90   \bool_if:NT \l__tag_para_bool {\tag_struct_end:}
91   \tag_struct_begin:n{tag=\l__ltboxes_tag_tl}
92 }
93
94 \socket_new_plug:nnn{tagsupport/parbox/after}{tag/dflt}
95 {
96   \tag_struct_end:
97   \bool_if:NT \l__tag_para_bool {\tag_struct_begin:n{tag=\l__tag_para_tag_tl}}
98   \tag_mc_begin_pop:n{ }
99 }

```

Activate the default tagging plug

```

100 \socket_assign_plug:nn{tagsupport/minipage/before}{tag/dflt}
101 \socket_assign_plug:nn{tagsupport/minipage/after} {tag/dflt}
102 \socket_assign_plug:nn{tagsupport/parbox/before} {tag/dflt}
103 \socket_assign_plug:nn{tagsupport/parbox/after} {tag/dflt}
104 </package>
105 <*latex-lab>
106 \ProvidesFile{minipage-latex-lab-testphase.ltx}
107   [\l_tlabminipagedate\space v\l_tlabminipageversion
108     code related to the tagging of minipage and parbox]
109 \RequirePackage{latex-lab-testphase-minipage}
110 </latex-lab>

```