

The latex-lab-minipage package

Changes related to the tagging of minipage and parbox

L^AT_EX Project*

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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 tagging sockets `parbox/before` and `parbox/after` which can be set to `noop`, if necessary.

```
1 <(*package)
```

2 Implementation

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

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?

```
5 \def\@kernel@init@minipage{}
6 \def\@kernel@init@parbox{}
```

We use sockets for the tag support code, as there will be cases where we want to exchange the content or disable it. The socket declarations are in `ltagging.dtx`.

```
7 %   \NewTaggingSocket{minipage/before}{0}
8 %   \NewTaggingSocket{minipage/after} {0}
9 %   \NewTaggingSocket{parbox/before}  {0}
10 %   \NewTaggingSocket{parbox/after}{0}
```

*Initial implementation done by Ulrike Fischer

2.2 Patch minipage

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

```
11 \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.

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

insert the socket

```
17 \UseTaggingSocket{minipage/before}% new
18 \setbox\@tempboxa\vbox\bgroup
19 \color@begingroup
20 \hsize\@tempdima
21 \textwidth\hsize \columnwidth\hsize
22 \@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.

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

And a hook at the end

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

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

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

And similar for `\parbox`

```

46 \long\def\@iiiparbox#1#2[#3]#4#5{%
47   \@kernel@init@parbox
48   \leavevmode
49   \setlength\@tempdima{#4}%

```

`\@begin@tempboxa` starts with a `\begingroup` but we also need to group the socket to avoid side effects.

```

50   \begingroup
51   \UseTaggingSocket{parbox/before}
52   \@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.

```

53   \UseTaggingSocket{para/restore}
54   #5\@@par}%
55   \ifx\relax#2\else
56     \setlength\@tempdimb{#2}%
57     \edef\@parboxto{to\the\@tempdimb}%
58     \fi
59     \if#1b\vbox
60     \else\if #1t\vtop
61     \else\vcenter@text
62     \fi\fi
63     \@parboxto{\let\hss\vss\let\unhbox\unvbox
64       \csname bm@#3\endcsname}%
65   \@end@tempboxa%
66   \UseTaggingSocket{parbox/after}

67   \endgroup
68   }

```

2.3 Tagging commands

```

69 \NewTaggingSocketPlug{minipage/before}{kernel}
70 {

```

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

```

71   \tag_mc_end_push:
72   \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.

```

73   \tag_struct_begin:n{tag=\UseStructureName{minipage}}

```

Heading commands inside the minipage should not try to close a Sect structure. We therefore assign special sockets:

```

74   \AssignTaggingSocketPlug{sec/begin}{insidebox}
75   \AssignTaggingSocketPlug{sec/end}{insidebox}
76   }

```

similar for the other sockets:

```

77 \NewTaggingSocketPlug{minipage/after}{kernel}
78 {
79   \tag_struct_end:
80   \bool_if:NT \l__tag_para_bool
81     { \tag_struct_begin:n{tag=\UseStructureName{para/textblock}} }
82   \tag_mc_begin_pop:n{ }
83 }
84
85 \NewTaggingSocketPlug{parbox/before}{kernel}
86 {
87   \tag_mc_end_push:
88   \bool_if:NT \l__tag_para_bool {\tag_struct_end:}
89   \tag_struct_begin:n{tag=\UseStructureName{parbox}}

```

Heading commands inside the parbox should not try to close a Sect structure. We therefore assign special sockets:

```

90   \AssignTaggingSocketPlug{sec/begin}{insidebox}
91   \AssignTaggingSocketPlug{sec/end}{insidebox}
92 }
93
94 \NewTaggingSocketPlug{parbox/after}{kernel}
95 {
96   \tag_struct_end:
97   \bool_if:NT \l__tag_para_bool
98     { \tag_struct_begin:n{tag=\UseStructureName{para/textblock}} }
99   \tag_mc_begin_pop:n{ }
100 }

```

Copies of the plugs with the previous names for compatibility. 2026-10-19 currently still used by tcolorbox After release 2026-06-01 they should be replaced by the new names and then removed.

```

101 \NewTaggingSocketPlug{minipage/before}{tag/dflt}
102 {
103   \tag_mc_end_push:
104   \bool_if:NT \l__tag_para_bool {\tag_struct_end:}
105   \tag_struct_begin:n{tag=\UseStructureName{minipage}}
106   \AssignTaggingSocketPlug{sec/begin}{insidebox}
107   \AssignTaggingSocketPlug{sec/end}{insidebox}
108 }
109 \NewTaggingSocketPlug{minipage/after}{tag/dflt}
110 {
111   \tag_struct_end:
112   \bool_if:NT \l__tag_para_bool
113     {\tag_struct_begin:n{tag=\UseStructureName{para/textblock}}}
114   \tag_mc_begin_pop:n{ }
115 }
116 \NewTaggingSocketPlug{parbox/before}{tag/dflt}
117 {
118   \tag_mc_end_push:
119   \bool_if:NT \l__tag_para_bool {\tag_struct_end:}
120   \tag_struct_begin:n{tag=\UseStructureName{parbox}}
121   \AssignTaggingSocketPlug{sec/begin}{insidebox}
122   \AssignTaggingSocketPlug{sec/end}{insidebox}

```

```

123   }
124   \NewTaggingSocketPlug{parbox/after}{tag/dflt}
125   {
126     \tag_struct_end:
127     \bool_if:NT \l__tag_para_bool
128       {\tag_struct_begin:n{tag=\UseStructureName{para/textblock}}}
129     \tag_mc_begin_pop:n{ }
130   }

```

Activate the default tagging plug

```

131   \AssignTaggingSocketPlug{minipage/before}{kernel}
132   \AssignTaggingSocketPlug{minipage/after} {kernel}
133   \AssignTaggingSocketPlug{parbox/before}  {kernel}
134   \AssignTaggingSocketPlug{parbox/after}   {kernel}
135   </package>

```