The latex-lab-minipage package
Changes related to the tagging of minipage and parbox

LaTeX 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.

```
⟨*package⟩
```

2 Implementation

```
\ProvidesExplPackage {latex-lab-testphase-minipage}
  {\ltlabminipagedate} {\ltlabminipageversion}
  {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?

```
\def\@kernel@init@minipage{}
\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 lttagging.dtx.

```
%   \NewTaggingSocket{minipage/before}{0}
%   \NewTaggingSocket{minipage/after} {0}
%   \NewTaggingSocket{parbox/before}  {0}
%   \NewTaggingSocket{parbox/after}{0}
```

*Initial implementation done by Ulrike Fischer

2.2 Patch minipage

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

```
\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.

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

insert the socket

```
  \UseTaggingSocket{minipage/before}% new
  \setbox\@tempboxa\vbox\bgroup
    \color@begingroup
      \hsize\@tempdima
      \textwidth\hsize \columnwidth\hsize
      \@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.

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

And a hook at the end

```
\def\endminipage{%
    \par
    \unskip
    \ifvoid\@mpfootins\else
      \vskip\skip\@mpfootins
      \normalcolor
      \footnoterule
      \unvbox\@mpfootins
    \fi
    \@minipagefalse   %% added 24 May 89
  \color@endgroup
  \egroup
```

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

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

And similar for \parbox

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

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

```
  \begingroup
  \UseTaggingSocket{parbox/before}
  \@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.

```
  \UseTaggingSocket{para/restore}
  #5\@@par}%
    \ifx\relax#2\else
      \setlength\@tempdimb{#2}%
      \edef\@parboxto{to\the\@tempdimb}%
    \fi
    \if#1b\vbox
    \else\if #1t\vtop
    \else\vcenter@text
    \fi\fi
    \@parboxto{\let\hss\vss\let\unhbox\unvbox
       \csname bm@#3\endcsname}%
  \@end@tempboxa%
  \UseTaggingSocket{parbox/after}

  \endgroup
  }
```

2.3 Tagging commands

```
\NewTaggingSocketPlug{minipage/before}{kernel}
  {
```

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

```
    \tag_mc_end_push:
    \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.

```
    \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:

```
    \AssignTaggingSocketPlug{sec/begin}{insidebox}
    \AssignTaggingSocketPlug{sec/end}{insidebox}
  }
```

similar for the other sockets:

```
\NewTaggingSocketPlug{minipage/after}{kernel}
  {
   \tag_struct_end:
   \bool_if:NT \l__tag_para_bool
     { \tag_struct_begin:n{tag=\UseStructureName{para/textblock}} }
   \tag_mc_begin_pop:n{}
  }

\NewTaggingSocketPlug{parbox/before}{kernel}
  {
   \tag_mc_end_push:
   \bool_if:NT \l__tag_para_bool {\tag_struct_end:}
   \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:

```
    \AssignTaggingSocketPlug{sec/begin}{insidebox}
    \AssignTaggingSocketPlug{sec/end}{insidebox}
  }

\NewTaggingSocketPlug{parbox/after}{kernel}
  {
   \tag_struct_end:
   \bool_if:NT \l__tag_para_bool
     { \tag_struct_begin:n{tag=\UseStructureName{para/textblock}} }
   \tag_mc_begin_pop:n{}
   }
```

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.

```
\NewTaggingSocketPlug{minipage/before}{tag/dflt}
  {
    \tag_mc_end_push:
    \bool_if:NT \l__tag_para_bool {\tag_struct_end:}
    \tag_struct_begin:n{tag=\UseStructureName{minipage}}
    \AssignTaggingSocketPlug{sec/begin}{insidebox}
    \AssignTaggingSocketPlug{sec/end}{insidebox}
  }
\NewTaggingSocketPlug{minipage/after}{tag/dflt}
  {
   \tag_struct_end:
   \bool_if:NT \l__tag_para_bool
     {\tag_struct_begin:n{tag=\UseStructureName{para/textblock}}}
   \tag_mc_begin_pop:n{}
  }
\NewTaggingSocketPlug{parbox/before}{tag/dflt}
  {
   \tag_mc_end_push:
   \bool_if:NT \l__tag_para_bool {\tag_struct_end:}
   \tag_struct_begin:n{tag=\UseStructureName{parbox}}
    \AssignTaggingSocketPlug{sec/begin}{insidebox}
    \AssignTaggingSocketPlug{sec/end}{insidebox}
```

```
  }
\NewTaggingSocketPlug{parbox/after}{tag/dflt}
  {
   \tag_struct_end:
   \bool_if:NT \l__tag_para_bool
     {\tag_struct_begin:n{tag=\UseStructureName{para/textblock}}}
   \tag_mc_begin_pop:n{}
   }
```

Activate the default tagging plug

```
\AssignTaggingSocketPlug{minipage/before}{kernel}
\AssignTaggingSocketPlug{minipage/after} {kernel}
\AssignTaggingSocketPlug{parbox/before}  {kernel}
\AssignTaggingSocketPlug{parbox/after}   {kernel}
```

⟨/package⟩