The setouterhbox package

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Abstract

If math stuff is set in an \hbox, then TeX performs some optimization and omits the implicite penalties \binoppenalty and \relpenalty. This packages tries to put stuff into an \hbox without getting lost of those penalties.

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*Please report any issues at https://github.com/ho-tex/oberdiek/issues

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1 Documentation

1.1 Introduction

There is a situation in hyperref's driver for dvips where the user wants to have links that can be broken across lines. However dvips doesn't support the feature. With option breaklinks hyperref sets the links as usual, put them in a box and write the link data with box dimensions into the appropriate \specials. Then, however, it does not set the complete unbreakable box, but it unwrappes the material inside to allow line breaks. Of course line breaking and glue setting will falsify the link dimensions, but line breaking was more important for the user.

1.2 Acknowledgement

Jonathan Fine, Donald Arsenau and me discussed the problem in the newsgroup comp.text.tex where Damian Menscher has started the thread, see [1].

The discussion was productive and generated many ideas and code examples. In order to have a more permanent result I wrote this package and tried to implement most of the ideas, a kind of summary of the discussion. Thus I want and have to thank Jonathan Fine and Donald Arsenau very much.

Two weeks later David Kastrup (posting in comp.text.tex, [2]) remembered an old article of Michael Downes ([3]) in TUGboat, where Michael Downes already presented the method we discuss here. Nowadays we have ε-TeX that extends the tool set of a TeX macro programmer. Especially useful ε-TeX was in this package for detecting and dealing with errorneous situations.

However also nowadays a perfect solution for the problem is still missing at macro level. Probably someone has to go deep in the internals of the TeX compiler to implement a switch that let penalties stay where otherwise TeX would remove them for optimization reasons.

1.3 Usage

Package loading. LaTeX: as usually:

```
\usepackage{setouterhbox}
```

The package can also be included directly, thus plain TeX users write:

```
\input setouterhbox.sty
```

Register allocation. The material will be put into a box, thus we need to know these box number. If you need to allocate a new box register:

LaTeX: \newsavebox{\⟨*name*⟩}

plain TeX: \newbox\⟨*name*⟩

Then \⟨*name*⟩ is a command that held the box number.

Box wrapping. LaTeX users put the material in the box with an environment similar to `lrbox`. The environment `setouterhbox` uses the same syntax and offers the same features, such as verbatim stuff inside:

`\begin{setouterhbox}{`⟨*box number*⟩`}`…`\end{setouterhbox}`

Users with plain TeX do not have environments, they use instead:

`\setouterhbox{`⟨*box number*⟩`}`…`\endsetouterhbox`

In both cases the material is put into an `\hbox` and assigned to the given box, denoted by ⟨*box number*⟩. Note the assignment is local, the same way `lrbox` behaves.

Unwrapping. The box material is ready for unwrapping:

`\unhbox`⟨*box number*⟩

1.4 Option hyperref

Package url uses math mode for typesetting urls. Break points are inserted by `\binoppenalty` and `\relpenalty`. Unhappily these break points are removed, if hyperref is used with option breaklinks and drivers that depend on pdfmark: dvips, vtexpdfmark, textures, and dvipsone. Thus the option hyperref enables the method of this package to avoid the removal of `\relpenalty` and `\binoppenalty`. Thus you get more break points. However, the link areas are still wrong for these drivers, because they are not supporting broken links.

Note, you need version 2006/08/16 v6.75c of package hyperref, because starting with this version the necessary hook is provided that package setouterhbox uses.

```
\usepackage[…]{hyperref}[2006/08/16]
\usepackage[hyperref]{setouterhbox}
```

Package order does not matter.

1.5 Example

```
⟨*example⟩
\documentclass[a5paper]{article}
\usepackage{url}[2005/06/27]
\usepackage{setouterhbox}

\newsavebox{\testbox}

\setlength{\parindent}{0pt}
\setlength{\parskip}{2em}

\begin{document}
\raggedright

\url{http://this.is.a.very.long.host.name/followed/%
by/a/very_long_long_long_path.html}%

\sbox\testbox{%
  \url{http://this.is.a.very.long.host.name/followed/%
  by/a/very_long_long_long_path.html}%
}%
\unhbox\testbox

\begin{setouterhbox}{\testbox}%
  \url{http://this.is.a.very.long.host.name/followed/%
  by/a/very_long_long_long_path.html}%
```

```
\end{setouterhbox}
\unhbox\testbox

\end{document}
⟨/example⟩
```

2 Implementation

Internal macros are prefixed by `\setouterhbox`, `@` is not used inside names, thus we do not need to care of its catcode if we are not using it as LaTeX package.

2.1 Package start stuff

```
⟨*package⟩
```

Prevent reloading more than one, necessary for plain TeX: Reload check, especially if the package is not used with LaTeX.

```
\begingroup\catcode61\catcode48\catcode32=10\relax%
  \catcode13=5 % ^^M
  \endlinechar=13 %
  \catcode35=6 % #
  \catcode39=12 % '
  \catcode44=12 % ,
  \catcode45=12 % -
  \catcode46=12 % .
  \catcode58=12 % :
  \catcode64=11 % @
  \catcode123=1 % {
  \catcode125=2 % }
  \expandafter\let\expandafter\x\csname ver@setouterhbox.sty\endcsname
  \ifx\x\relax % plain-TeX, first loading
  \else
    \def\empty{}%
    \ifx\x\empty % LaTeX, first loading,
      % variable is initialized, but \ProvidesPackage not yet seen
    \else
      \expandafter\ifx\csname PackageInfo\endcsname\relax
        \def\x#1#2{%
          \immediate\write-1{Package #1 Info: #2.}%
        }%
      \else
        \def\x#1#2{\PackageInfo{#1}{#2, stopped}}%
      \fi
      \x{setouterhbox}{The package is already loaded}%
      \aftergroup\endinput
    \fi
  \fi
\endgroup%
```

Package identification:

```
\begingroup\catcode61\catcode48\catcode32=10\relax%
  \catcode13=5 % ^^M
  \endlinechar=13 %
  \catcode35=6 % #
  \catcode39=12 % '
  \catcode40=12 % (
  \catcode41=12 % )
  \catcode44=12 % ,
  \catcode45=12 % -
  \catcode46=12 % .
  \catcode47=12 % /
  \catcode58=12 % :
  \catcode64=11 % @
```

```
  \catcode91=12 % [
  \catcode93=12 % ]
  \catcode123=1 % {
  \catcode125=2 % }
  \expandafter\ifx\csname ProvidesPackage\endcsname\relax
    \def\x#1#2#3[#4]{\endgroup
      \immediate\write-1{Package: #3 #4}%
      \xdef#1{#4}%
    }%
  \else
    \def\x#1#2[#3]{\endgroup
      #2[{#3}]%
      \ifx#1\@undefined
        \xdef#1{#3}%
      \fi
      \ifx#1\relax
        \xdef#1{#3}%
      \fi
    }%
  \fi
\expandafter\x\csname ver@setouterhbox.sty\endcsname
\ProvidesPackage{setouterhbox}%
  [2016/05/16 v1.8 Set hbox in outer horizontal mode (HO)]%
\begingroup\catcode61\catcode48\catcode32=10\relax%
  \catcode13=5 % ^^M
  \endlinechar=13 %
  \catcode123=1 % {
  \catcode125=2 % }
  \catcode64=11 % @
  \def\x{\endgroup
    \expandafter\edef\csname setouterhboxAtEnd\endcsname{%
      \endlinechar=\the\endlinechar\relax
      \catcode13=\the\catcode13\relax
      \catcode32=\the\catcode32\relax
      \catcode35=\the\catcode35\relax
      \catcode61=\the\catcode61\relax
      \catcode64=\the\catcode64\relax
      \catcode123=\the\catcode123\relax
      \catcode125=\the\catcode125\relax
    }%
  }%
\x\catcode61\catcode48\catcode32=10\relax%
\catcode13=5 % ^^M
\endlinechar=13 %
\catcode35=6 % #
\catcode64=11 % @
\catcode123=1 % {
\catcode125=2 % }
\def\TMP@EnsureCode#1#2{%
  \edef\setouterhboxAtEnd{%
    \setouterhboxAtEnd
    \catcode#1=\the\catcode#1\relax
  }%
  \catcode#1=#2\relax
}
\TMP@EnsureCode{40}{12}% (
\TMP@EnsureCode{41}{12}% )
\TMP@EnsureCode{44}{12}% ,
\TMP@EnsureCode{45}{12}% -
\TMP@EnsureCode{46}{12}% .
\TMP@EnsureCode{47}{12}% /
\TMP@EnsureCode{58}{12}% :
```

```
\TMP@EnsureCode{60}{12}% <
\TMP@EnsureCode{62}{12}% >
\TMP@EnsureCode{91}{12}% [
\TMP@EnsureCode{93}{12}% ]
\TMP@EnsureCode{96}{12}% `
\edef\setouterhboxAtEnd{\setouterhboxAtEnd\noexpand\endinput}
```

2.2 Interface macros

\setouterhboxBox The method requires a global box assignment. To be on the safe side, a new box register is allocated for this global box assignment.

```
\newbox\setouterhboxBox
```

\setouterhboxFailure Error message for both plain TEX and LATEX

```
\begingroup\expandafter\expandafter\expandafter\endgroup
\expandafter\ifx\csname RequirePackage\endcsname\relax
  \input infwarerr.sty\relax
\else
  \RequirePackage{infwarerr}[2016/05/16]%
\fi
\edef\setouterhboxFailure#1#2{%
  \expandafter\noexpand\csname @PackageError\endcsname
     {setouterhbox}{#1}{#2}%
}
```

2.3 Main part

eTeX provides much better means for checking error conditions. Thus lines marked by "E" are executed if eTeX is available, otherwise the lines marked by "T" are used.

```
\begingroup\expandafter\expandafter\expandafter\endgroup
\expandafter\ifx\csname lastnodetype\endcsname\relax
  \catcode`T=9 % ignore
  \catcode`E=14 % comment
\else
  \catcode`T=14 % comment
  \catcode`E=9 % ignore
\fi
```

\setouterhboxRemove Remove all kern, glue, and penalty nodes; poor man's version, if ε-TEX is not available

```
\def\setouterhboxRemove{%
E \ifnum\lastnodetype<11 %
E   \else
E   \ifnum\lastnodetype>13 %
E   \else
      \unskip\unkern\unpenalty
E     \expandafter\expandafter\expandafter\setouterhboxRemove
E   \fi
E \fi
}%
```

\setouterhbox Passing the box contents by macro parameter would prevent catcode changes in the box contents like by `\verb`. Also `\bgroup` and `\egroup` does not work, because stuff has to be added at the begin and end of the box, thus the syntax `\setouterhbox{`⟨*box number*⟩`}`...`\endsetouterhbox` is used. Also we automatically get an environment `setouterhbox` if LATEX is used.

```
\def\setouterhbox#1{%
  \begingroup
    \def\setouterhboxNum{#1}%
    \setbox0\vbox\bgroup
```

```
177 T     \kern.123pt\relax % marker
178 T     \kern0pt\relax % removed by \setouterhboxRemove
179       \begingroup
180         \everypar{}%
181         \noindent
182 }
```

\endsetouterhbox Most of the work is done in the end part, thus the heart of the method follows:

```
183 \def\endsetouterhbox{%
184       \endgroup
```

Omit the first pass to get the penalties of the second pass.

```
185       \pretolerance-1 %
```

We don't want a third pass with \emergencystretch.

```
186       \tolerance10000 %
187       \hsize\maxdimen
```

Line is not underfull:

```
188       \parfillskip 0pt plus 1filll\relax
189       \leftskip0pt\relax
```

Suppress underful \hbox warnings, is explicit line breaks are used.

```
190       \rightskip0pt plus 1fil\relax
191       \everypar{}%
```

Ensure that there is a paragraph and prevents \endgraph from eating terminal glue:

```
192       \kern0pt%
193       \endgraf
194       \setouterhboxRemove
195 E     \ifnum\lastnodetype=1 %
196 E       \global\setbox\setouterhboxBox\lastbox
197 E       \loop
198 E         \setouterhboxRemove
199 E       \ifnum\lastnodetype=1 %
200 E         \setbox0=\lastbox
201 E         \global\setbox\setouterhboxBox=\hbox{%
202 E           \unhbox0 %
```

Remove \rightskip, a penalty with -10000 is part of the previous line.

```
203 E           \unskip
204 E           \unhbox\setouterhboxBox
205 E         }%
206 E       \repeat
207 E     \else
208 E       \setouterhboxFailure{%
209 E         Something is wrong%
210 E       }{%
211 E         Could not find expected line.%
212 E         \MessageBreak
213 E         (\string\lastnodetype: \number\lastnodetype, expected: 1)%
214 E       }%
215 E     \fi
216 E     \setouterhboxRemove
217 T     \global\setbox\setouterhboxBox\lastbox
218 T     \loop
219 T       \setouterhboxRemove
220 T       \setbox0=\lastbox
221 T     \ifcase\ifvoid0 1\else0\fi
222 T       \global\setbox\setouterhboxBox=\hbox{%
223 T         \unhbox0 %
```

Remove \rightskip, a penalty with -10000 is part of the previous line.

```
224 T         \unskip
```

```
225 T        \unhbox\setouterhboxBox
226 T      }%
227 T    \repeat
228 T    \ifdim.123pt=\lastkern
229 T    \else
230 T      \setouterhboxFailure{%
231 T        Something is wrong%
232 T      }{%
233 T        Unexpected stuff was detected before the line.%
234 T      }%
235 T    \fi
236 T  \egroup
237 T  \ifcase \ifnum\wd0=0 \else 1\fi
238 T         \ifdim\ht0=.123pt \else 1\fi
239 T         \ifnum\dp0=0 \else 1\fi
240 T         0 %
241 E    \ifnum\lastnodetype=-1 %
```

There was just one line that we have caught.

```
242      \else
243        \setouterhboxFailure{%
244           Something is wrong%
245        }{%
246           After fetching the line there is more unexpected stuff.%
247 E          \MessageBreak
248 E          (\string\lastnodetype: \number\lastnodetype, expected: -1)%
249        }%
250      \fi
251 E  \egroup
252  \expandafter\endgroup
253  \expandafter\setouterhboxFinish\expandafter{%
254   \number\setouterhboxNum
255  }%
256 }
```

2.4 Environment support

Check `\@currenvir` for the case that `\setouterhbox` was called as environment. Then the box assignment must be put after the `\endgroup` of `\end{…}`.

```
257 \def\setouterhboxCurr{setouterhbox}
258 \def\setouterhboxLast#1{%
259  \setbox#1\hbox{%
260   \unhbox\setouterhboxBox
261   \unskip % remove \rightskip glue
262   \unskip % remove \parfillskip glue
263   \unpenalty % remove paragraph ending \penalty 10000
264   \unkern % remove explicit kern inserted above
265  }%
266 }
```

`\setouterhboxFinish` `#1` is an explicit number.

```
267 \def\setouterhboxFinish#1{%
268  \begingroup\expandafter\expandafter\expandafter\endgroup
269  \expandafter\ifx\csname @currenvir\endcsname\setouterhboxCurr
270   \aftergroup\setouterhboxLast
271   \aftergroup{%
272   \setouterhboxAfter #1\NIL
273   \aftergroup}%
274  \else
275   \setouterhboxLast{#1}%
276  \fi
277 }
```

\setouterhboxAfter #1 is an explicit number.

```
\def\setouterhboxAfter#1#2\NIL{%
  \aftergroup#1%
  \ifx\\#2\\%
  \else
    \setouterhboxReturnAfterFi{%
      \setouterhboxAfter#2\NIL
    }%
  \fi
}
```

\setouterhboxReturnAfterFi A utility macro to get tail recursion.

```
\long\def\setouterhboxReturnAfterFi#1\fi{\fi#1}
```

Restore catcodes we have need to distinguish between the implementation with and without ε-TEX.

```
\catcode69=11\relax % E
\catcode84=11\relax % T
```

2.5 Option hyperref

```
\begingroup
  \def\x{LaTeX2e}%
\expandafter\endgroup
\ifx\x\fmtname
\else
  \expandafter\setouterhboxAtEnd
\fi%
```

\Hy@setouterhbox \Hy@setouterhbox is the internal hook that hyperref uses since 2006/02/12 v6.75a.

```
\DeclareOption{hyperref}{%
  \long\def\Hy@setouterhbox#1#2{%
    \setouterhbox{#1}#2\endsetouterhbox
  }%
}

\ProcessOptions\relax

\setouterhboxAtEnd%
⟨/package⟩
```

3 Test

3.1 Catcode checks for loading

```
⟨*test1⟩

\catcode`\{=1 %
\catcode`\}=2 %
\catcode`\#=6 %
\catcode`\@=11 %
\expandafter\ifx\csname count@\endcsname\relax
  \countdef\count@=255 %
\fi
\expandafter\ifx\csname @gobble\endcsname\relax
  \long\def\@gobble#1{}%
\fi
\expandafter\ifx\csname @firstofone\endcsname\relax
  \long\def\@firstofone#1{#1}%
\fi
\expandafter\ifx\csname loop\endcsname\relax
  \expandafter\@firstofone
\else
```

```
  \expandafter\@gobble
\fi
{%
  \def\loop#1\repeat{%
    \def\body{#1}%
    \iterate
  }%
  \def\iterate{%
    \body
      \let\next\iterate
    \else
      \let\next\relax
    \fi
    \next
  }%
  \let\repeat=\fi
}%
\def\RestoreCatcodes{}
\count@=0 %
\loop
  \edef\RestoreCatcodes{%
    \RestoreCatcodes
    \catcode\the\count@=\the\catcode\count@\relax
  }%
\ifnum\count@<255 %
  \advance\count@ 1 %
\repeat

\def\RangeCatcodeInvalid#1#2{%
  \count@=#1\relax
  \loop
    \catcode\count@=15 %
  \ifnum\count@<#2\relax
    \advance\count@ 1 %
  \repeat
}
\def\RangeCatcodeCheck#1#2#3{%
  \count@=#1\relax
  \loop
    \ifnum#3=\catcode\count@
    \else
      \errmessage{%
        Character \the\count@\space
        with wrong catcode \the\catcode\count@\space
        instead of \number#3%
      }%
    \fi
  \ifnum\count@<#2\relax
    \advance\count@ 1 %
  \repeat
}
\def\space{ }
\expandafter\ifx\csname LoadCommand\endcsname\relax
  \def\LoadCommand{\input setouterhbox.sty\relax}%
\fi
\def\Test{%
  \RangeCatcodeInvalid{0}{47}%
  \RangeCatcodeInvalid{58}{64}%
  \RangeCatcodeInvalid{91}{96}%
  \RangeCatcodeInvalid{123}{255}%
  \catcode`\@=12 %
  \catcode`\\=0 %
```

```
  \catcode`\%=14 %
  \LoadCommand
  \RangeCatcodeCheck{0}{36}{15}%
  \RangeCatcodeCheck{37}{37}{14}%
  \RangeCatcodeCheck{38}{47}{15}%
  \RangeCatcodeCheck{48}{57}{12}%
  \RangeCatcodeCheck{58}{63}{15}%
  \RangeCatcodeCheck{64}{64}{12}%
  \RangeCatcodeCheck{65}{90}{11}%
  \RangeCatcodeCheck{91}{91}{15}%
  \RangeCatcodeCheck{92}{92}{0}%
  \RangeCatcodeCheck{93}{96}{15}%
  \RangeCatcodeCheck{97}{122}{11}%
  \RangeCatcodeCheck{123}{255}{15}%
  \RestoreCatcodes
}
\Test
\csname @@end\endcsname
\end
```

⟨/test1⟩

3.2 Test with package **url**

```
⟨*test2⟩
\nofiles
\documentclass[a5paper]{article}
\usepackage{url}[2005/06/27]
\usepackage{setouterhbox}

\newsavebox{\testbox}

\setlength{\parindent}{0pt}
\setlength{\parskip}{2em}

\begin{document}
\raggedright

\url{http://this.is.a.very.long.host.name/followed/%
by/a/very_long_long_long_path.html}%

\sbox\testbox{%
  \url{http://this.is.a.very.long.host.name/followed/%
  by/a/very_long_long_long_path.html}%
}%
\unhbox\testbox

\begin{setouterhbox}{\testbox}%
  \url{http://this.is.a.very.long.host.name/followed/%
  by/a/very_long_long_long_path.html}%
\end{setouterhbox}
\unhbox\testbox

\end{document}
⟨/test2⟩
```

4 Installation

4.1 Download

Package. This package is available on CTAN[1]:

CTAN:macros/latex/contrib/oberdiek/setouterhbox.dtx The source file.

[1] http://ctan.org/pkg/setouterhbox

CTAN:macros/latex/contrib/oberdiek/setouterhbox.pdf Documentation.

Bundle. All the packages of the bundle 'oberdiek' are also available in a TDS compliant ZIP archive. There the packages are already unpacked and the documentation files are generated. The files and directories obey the TDS standard.

CTAN:install/macros/latex/contrib/oberdiek.tds.zip

TDS refers to the standard "A Directory Structure for TEX Files" (CTAN:tds/tds.pdf). Directories with texmf in their name are usually organized this way.

4.2 Bundle installation

Unpacking. Unpack the oberdiek.tds.zip in the TDS tree (also known as texmf tree) of your choice. Example (linux):

```
unzip oberdiek.tds.zip -d ~/texmf
```

Script installation. Check the directory TDS:scripts/oberdiek/ for scripts that need further installation steps. Package attachfile2 comes with the Perl script pdfatfi.pl that should be installed in such a way that it can be called as pdfatfi. Example (linux):

```
chmod +x scripts/oberdiek/pdfatfi.pl
cp scripts/oberdiek/pdfatfi.pl /usr/local/bin/
```

4.3 Package installation

Unpacking. The .dtx file is a self-extracting docstrip archive. The files are extracted by running the .dtx through plain TEX:

```
tex setouterhbox.dtx
```

TDS. Now the different files must be moved into the different directories in your installation TDS tree (also known as texmf tree):

```
setouterhbox.sty            → tex/generic/oberdiek/setouterhbox.sty
setouterhbox.pdf            → doc/latex/oberdiek/setouterhbox.pdf
setouterhbox-example.tex    → doc/latex/oberdiek/setouterhbox-example.tex
test/setouterhbox-test1.tex → doc/latex/oberdiek/test/setouterhbox-test1.tex
test/setouterhbox-test2.tex → doc/latex/oberdiek/test/setouterhbox-test2.tex
setouterhbox.dtx            → source/latex/oberdiek/setouterhbox.dtx
```

If you have a docstrip.cfg that configures and enables docstrip's TDS installing feature, then some files can already be in the right place, see the documentation of docstrip.

4.4 Refresh file name databases

If your TEX distribution (teTEX, mikTEX, ...) relies on file name databases, you must refresh these. For example, teTEX users run texhash or mktexlsr.

4.5 Some details for the interested

Unpacking with LATEX. The .dtx chooses its action depending on the format:

plain TEX: Run docstrip and extract the files.

LATEX: Generate the documentation.

If you insist on using LATEX for docstrip (really, docstrip does not need LATEX), then inform the autodetect routine about your intention:

```
latex \let\install=y\input{setouterhbox.dtx}
```

Do not forget to quote the argument according to the demands of your shell.

Generating the documentation. You can use both the .dtx or the .drv to generate the documentation. The process can be configured by the configuration file ltxdoc.cfg. For instance, put this line into this file, if you want to have A4 as paper format:

```
\PassOptionsToClass{a4paper}{article}
```

An example follows how to generate the documentation with pdfLaTeX:

```
pdflatex setouterhbox.dtx
makeindex -s gind.ist setouterhbox.idx
pdflatex setouterhbox.dtx
makeindex -s gind.ist setouterhbox.idx
pdflatex setouterhbox.dtx
```

5 Catalogue

The following XML file can be used as source for the TeX Catalogue. The elements caption and description are imported from the original XML file from the Catalogue. The name of the XML file in the Catalogue is setouterhbox.xml.

```
⟨*catalogue⟩
<?xml version='1.0' encoding='us-ascii'?>
<!DOCTYPE entry SYSTEM 'catalogue.dtd'>
<entry datestamp='$Date$' modifier='$Author$' id='setouterhbox'>
  <name>setouterhbox</name>
  <caption>Set hbox in outer horizontal mode.</caption>
  <authorref id='auth:oberdiek'/>
  <copyright owner='Heiko Oberdiek' year='2005-2007'/>
  <license type='lppl1.3'/>
  <version number='1.8'/>
  <description>
    If math stuff is set in an <tt>\hbox</tt>, then TeX
    performs some optimization and omits the implicit
    penalties <tt>\binoppenalty</tt> and <tt>\relpenalty</tt>.
    This packages tries to put stuff into an <tt>\hbox</tt>
    without losing those penalties.
    <p/>
    The package is part of the <xref refid='oberdiek'>oberdiek</xref> bundle.
  </description>
  <documentation details='Package documentation'
      href='ctan:/macros/latex/contrib/oberdiek/setouterhbox.pdf'/>
  <ctan file='true' path='/macros/latex/contrib/oberdiek/setouterhbox.dtx'/>
  <miktex location='oberdiek'/>
  <texlive location='oberdiek'/>
  <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'/>
</entry>
⟨/catalogue⟩
```

6 References

[1] Damian Menscher, news:comp.text.tex, *overlong lines in List of Figures*, <dh058tqbd1@news.ks.uiuc.edu>, 23rd September 2005. http://groups.google.com/group/comp.text.tex/msg/79648d4cf1f8bc13

[2] David Kastrup, news:comp.text.tex, *Re: ANN: outerhbox.sty – collect horizontal material, for unboxing into a paragraph*, <85y855lrx3.fsf@lola.goethe.zz>, 7th October 2005. http://groups.google.com/group/comp.text.tex/msg/7cf0a345ef932e52

[3] Michael Downes, *Line breaking in* \unhboxed *Text*, TUGboat 11 (1990), pp. 605–612.

[4] Sebastian Rahtz, Heiko Oberdiek: *The hyperref package*; 2006/08/16 v6.75c; CTAN:macros/latex/contrib/hyperref/.

7 History

[2005/10/05 v1.0]

- First version.

[2005/10/07 v1.1]

- Option hyperref added.

[2005/10/18 v1.2]

- Support for explicit line breaks added.

[2006/02/12 v1.3]

- DTX format.
- Documentation extended.

[2006/08/26 v1.4]

- Date of hyperref updated.

[2007/04/26 v1.5]

- Use of package infwarerr.

[2007/05/17 v1.6]

- Standard header part for generic files.

[2007/09/09 v1.7]

- Catcode section added.

[2016/05/16 v1.8]

- Documentation updates.

8 Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; plain numbers refer to the code lines where the entry is used.

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