The **tabularht** package

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Abstract

This package defines some environments that adds a height specification to tabular and array.

Contents

1 Usage

```
\usepackage{tabularht}
```

The package provides the following environments that extend the tabular/array environment by a height specification as first argument:

- `tabularht`, `tabularht*`

- `arrayht`

- `tabularhtx` (if package `tabularx` is loaded)

The height argument allows a length specification, package `calc` is supported if used. This means, the tabular will have the specified height. You can also use the prefixes `to=` and `spread=`. `to=` is the default, `spread=` means, the natural height of the tabular box is changed by the length after `spread=`.

Examples:

```
\begin{tabularht}{1in}         → height is 1in
\begin{tabularht}{to=1in}      → height is 1in
\begin{tabularht}{spread=0pt}  → natural height, same as \begin{tabular}
\begin{tabularht}{spread=1in}  → natural height increased by 1in
```

Hint: See also package `tabularkv`, it provides an interface, where most parameters for the environments can be given by key-value pairs.

`\interrowspace{…}`

Adds space between table rows. It is essentially the same as `\noalign{\vspace{...}}`.

`\interrowfill`

Short for `\interrowspace{\fill}`

`\interrowstart … \interrowstop`

Marker commands, useful for option vlines.

1.1 Option **vlines**

Warning: This stuff is experimental.

Vertical lines are interrupted, if space is inserted in `\noalign`, `\interrowspace`, `\addlinespace` (booktabs), between double `\hlines`. This option tries to detect and add the vertical lines. The lines in a tabular with `tabularht` support (environments of this package) are numbered from left to right. The gap that is controlled by `\interrowspace` or inbetween `\interrowstart` and `\interrowstop` is then filled with the detected vertical lines.

If only a limited selection of the lines should be drawn, the commands know an optional argument with a list of line numbers, e.g.

```
\begin{tabularht}{50mm}{|l|l|}
  Hello & World\\
  \interrowfill[1,3]
  Foo & Bar
\end{tabularht}
```

There are three lines, but the middle line is not drawn in the gap between the first and second row. Zero can be used to suppress all lines:

```
\interrowspace[0]{10mm}
```

The syntax of the commands with the optional argument with the line number list ⟨*list*⟩. ⟨*list*⟩ is a comma separated list of numbers, ⟨*height*⟩ means the height specification described above with the optional prefixes `to=` or `spread=`.

```
\interrowspace [⟨list⟩] {⟨height⟩}
\interrowfill [⟨list⟩]
\interrowstart [⟨list⟩] ... \interrowstop
```

Option vlines is driver dependent and uses ε-TeX features.

pdftex: pdfTeX in PDF mode. Here the positions of the lines are written with the help of the `\pdfsavepos` feature into the `.aux` file(s). Therefore you need two LaTeX runs to get the lines.

dvips: Here, PostScript's currentpoint it used to get the line positions. The lines are then drawn at the end of the page. Thus one LaTeX/dvips run is sufficient for this option.

Other drivers:

    PostScript drivers: probably possible, an end of page hook would be nice.

    VTeX: with GeX (PostScript interpreter) probably possible.

    dvipdfm: no idea. The big problem is, how to get the current position?

1.2 Limitations

- Vertical lines are interrupted by `\noalign{\vfill}`.

1.3 Compatibility

- array, delarray, tabularx are supported.

- There can be problems with packages that redefine `\@array` (or `\@@array`, `\@tabarray`) and `\@arrayrule` (for option vlines).

- colortbl: it should at least work, but there isn't support for filling the gaps with color, neither the rules nor the backgrounds.

1.4 Examples

1.4.1 Example 1

```
 1 ⟨*example1⟩
 2 \documentclass{article}
 3 \usepackage{tabularht}
 4
 5 \begin{document}
 6 \fbox{%
 7   \begin{tabularht*}{1in}{4in}{@{}l@{\extracolsep{\fill}}r@{}}%
 8     upper left corner & upper right corner\\%
 9     \noalign{\vfill}%
10     \multicolumn{2}{@{}c@{}}{bounding box}\\%
11     \noalign{\vfill}%
12     lower left corner & lower right corner\\%
13   \end{tabularht*}%
14 }
15 \end{document}
16 ⟨/example1⟩
```

1.4.2 Example 2

```
17 ⟨*example2⟩
18 \documentclass{article}
19 \usepackage{booktabs}
20 \usepackage[dvips,vlines]{tabularht}
21
22 \begin{document}
23
24 \begin{tabularht}{spread=0pt}{|l|l|}
25   \hline
26   First&Line\\%
27   \hline
28 \interrowstart
29   \addlinespace[10mm]%
30 \interrowstop
31   \hline
32   Second&Line\\%
33 \interrowstart
34   \hline
35   \hline
36 \interrowstop
37   Third&Line\\%
38   \hline
39 \interrowspace{10mm}
40   \hline
41   Fourth&Line\\%
42   \hline
43 \end{tabularht}
44
45 \end{document}
46 ⟨/example2⟩
```

2 Implementation

```
47 ⟨*package⟩
```

Package identification.
```
48 \NeedsTeXFormat{LaTeX2e}
49 \ProvidesPackage{tabularht}%
50   [2007/04/11 v2.5 Tabular with height specified (HO)]
```

2.1 Environments

```
51 \let\@toarrayheight\@empty
52 \let\tabH@array@init\@empty
53
54 \toks@={%
55   \begingroup
56     \long\def\x#1\vcenter\fi\fi\bgroup#2\@sharp#3#4\@nil{%
57       \endgroup
58       \gdef\@array[##1]##2{%
59         \tabH@array@init
60         #1%
61         \vcenter\fi\fi
62         \@toarrayheight
63         \bgroup
64         \let\@toarrayheight\@empty
65         #2\@sharp###3#4%
66       }%
67     }%
68   \expandafter\x\@array[#1]{#2}\@nil % hash-ok
69 }
70 \edef\tabH@patch@array{\the\toks@}
71 \def\tabH@patch@@array{%
72   \ifx\@array\@@array
```

```
73       \def\reserved@a{\let\@@array\@array}%
74     \else
75       \let\reserved@a\relax
76     \fi
77     \tabH@patch@array
78     \reserved@a
79 }
80 \tabH@patch@@array
81
82 \@ifpackageloaded{array}{}{%
83     \AtBeginDocument{%
84       \@ifpackageloaded{array}{%
85         \tabH@patch@@array
86       }{}%
87     }%
88 }
89
90 \def\tabH@setheight#1{%
91     \tabH@@setheight#1==\@nil
92 }
93 \def\tabH@@setheight#1=#2=#3\@nil{%
94     \ifx\\#2#3\\%
95       \setlength{\dimen@}{#1}%
96       \edef\@toarrayheight{to\the\dimen@}%
97     \else
98       \edef\tabH@temp{\zap@space#1 \@empty}%
99       \ifx\tabH@temp\tabH@to
100      \else
101        \ifx\tabH@temp\tabH@spread
102        \else
103          \PackageError{tabularht}{%
104            Unknown height specifier %
105            `\expandafter\strip@prefix\meaning\tabH@temp'%
106          }{%
107            The height dimension for tabular height can be prefixed%
108            \MessageBreak
109            with `to=' or `spread=', default is `to='.%
110          }%
111          \let\tabH@temp\tabH@to
112        \fi
113      \fi
114      \setlength{\dimen@}{#2}%
115      \edef\@toarrayheight{\tabH@temp\the\dimen@}%
116    \fi
117 }
118 \def\tabH@to{to}
119 \def\tabH@spread{spread}
```

First argument is the height of the table, then the orignal arguments for tabular
follow.

```
120 \newenvironment{tabularht}[1]{%
121     \tabH@setheight{#1}%
122     \tabular
123 }{%
124     \endtabular
125 }
126
127 \newenvironment{tabularht*}[1]{%
128     \tabH@setheight{#1}%
129     \@nameuse{tabular*}%
130 }{%
131     \@nameuse{endtabular*}%
132 }
```

```latex
133
134 \newenvironment{tabularhtx}[1]{%
135   \tabH@setheight{#1}%
136   \tabularx
137 }{%
138   \endtabularx
139 }
140
141 \newenvironment{arrayht}[1]{%
142   \tabH@setheight{#1}%
143   \array
144 }{%
145   \endarray
146 }
147
148 \def\interrowspace{%
149   \noalign\bgroup
150     \tabH@interrowspace
151 }
152 \newcommand*{\tabH@interrowspace}[2][]{%
153     \tabH@vspace{#1}{#2}%
154   \egroup
155 }
156 \def\interrowfill{%
157   \noalign\bgroup
158     \tabH@interrowfill
159 }
160 \newcommand*{\tabH@interrowfill}[1][]{%
161     \tabH@vspace{#1}{\fill}%
162   \egroup
163 }
164 \def\tabH@vspace#1#2{%
165   \tabH@vspace@start{#1}%
166   \vspace{#2}%
167   \tabH@vspace@stop
168 }
169 \let\tabH@vspace@start\@gobble
170 \let\tabH@vspace@stop\@empty
171
172 \newcommand*{\interrowstart}{%
173   \noalign\bgroup
174     \tabH@interrowstart
175 }
176 \newcommand*{\tabH@interrowstart}[1][]{%
177     \tabH@vspace@start{#1}%
178   \egroup
179 }
180 \newcommand*{\interrowstop}{%
181   \noalign{\tabH@vspace@stop}%
182 }
```

2.2 Options

```latex
183 \providecommand*{\tabH@driver}{}
184
185 \DeclareOption{vlines}{%
186   \let\tabH@temp\relax
187 }
188 \DeclareOption{pdftex}{}
189 \DeclareOption{dvips}{%
190   \def\tabH@driver{dvips}%
191 }
192 \ProcessOptions*\relax
```

```
193
194 \ifx\tabH@temp\relax
195 \else
196   \expandafter\endinput
197 \fi
198
199 \begingroup
200   \@ifundefined{eTeXversion}{%
201     \PackageError{tabularht}{%
202       Option `vlines' requires eTeX%
203     }{%
204       Use of eTeX is recommended for LaTeX, see ltnews16.%
205     }%
206     \endgroup
207     \endinput
208   }{}%
209 \endgroup
```

2.3 Option vlines, driver independent stuff

```
210 \begingroup
211   \let\@addtoreset\@gobbletwo
212   \newcounter{tabH@unique}%
213 \endgroup
214 \let\tabH@currenttab\@empty
215
216 \def\tabH@array@init{%
217   \ifx\@toarrayheight\@empty
218     % ignore vertical lines of nested tabular environments
219     \let\tabH@currenttab\@empty
220   \else
221     \stepcounter{tabH@unique}%
222     \edef\tabH@currenttab{\the\c@tabH@unique}%
223   \fi
224 }
225
226 \renewcommand*{\@arrayrule}{%
227   \@addtopreamble{%
228     \hskip -.5\arrayrulewidth
229     \ifx\tabH@currenttab\@empty
230     \else
231       \tabH@vrule{\tabH@currenttab}%
232     \fi
233     \begingroup
234       \expandafter\ifx\csname CT@arc@\endcsname\relax
235       \else
236         \expandafter\CT@arc@
237       \fi
238       \vline
239     \endgroup
240     \hskip -.5\arrayrulewidth
241   }%
242 }
243 \let\tabH@arrayrule\@arrayrule
244 \AtBeginDocument{%
245   \@ifpackageloaded{colortbl}{%
246     \let\@arrayrule\tabH@arrayrule
247   }{}%
248 }
249
250 \let\tabH@vrule\@gobble
```

2.4 Driver pdftex

```
251 \RequirePackage{ifpdf}
252 \ifpdf
253   \begingroup
254     \@ifundefined{pdfsavepos}{%
255       \PackageError{tabularht}{%
256         Your pdfTeX is too old%
257       }{%
258         \string\pdfsavepos\space is missing.%
259       }%
260       \endgroup
261       \csname fi\endcsname
262       \endinput
263     }{}%
264
265     \let\on@line\@empty
266     \PackageInfo{tabularht}{%
267       Using driver `pdftex' because of pdfTeX in PDF mode%
268     }%
269   \endgroup
270
271   \protected\def\tabH@vrule#1{%
272     \if@filesw
273       \pdfsavepos
274       \protected@write\@auxout{%
275         \let\tabH@lastxpos\relax
276       }{%
277         \tabH@aux@vrule{#1}{\tabH@lastxpos}%
278       }%
279     \fi
280   }%
281
282   \def\tabH@lastxpos{\the\pdflastxpos}%
283   \def\tabH@lastypos{\the\pdflastypos}%
284
285   % The .aux file contains three commands:
286   % \tabH@aux@vrule{tabular id}{x position}
287   % \tabH@aux@vstart{tabular id}{row id}{x position}{y position}
288   % \tabH@aux@vstop{y position}
289   %
290   \AtBeginDocument{%
291     % The .aux files are read the first time before
292     % \AtBeginDocument and later at \end{document}.
293     % \tabH@aux@done is a marker to distinguish
294     % between these two readings. Only in the first
295     % case we need the \tabH@aux@... commands.
296     \let\tabH@aux@done\@empty
297     \if@filesw
298       \immediate\write\@mainaux{%
299         \@percentchar\@percentchar BeginProlog: tabularht%
300       }%
301       % items in the aux file are executed,
302       % if tabularht is loaded
303       % and during the aux file read at \begin{document} only
304       \immediate\write\@mainaux{%
305         \detokenize{%
306           % the \tabH@aux@... commands are needed only if
307           % tabularht is loaded with driver pdftex.
308           \@ifundefined{tabH@aux@vrule}\@secondoftwo\@firstofone
309           {%
310             % disable commands except for the first .aux files reading
311             \@ifundefined{tabH@aux@done}\@gobble\@firstofone
312           }%
```

```
313              {%
314                \let\tabH@aux@vrule\@gobbletwo
315                \let\tabH@aux@vstart\@gobblefour
316                \let\tabH@aux@vstop\@gobble
317              }%
318            }%
319          }%
320          \immediate\write\@mainaux{%
321            \@percentchar\@percentchar EndProlog: tabularht%
322          }%
323        \fi
324      }%
325
326      % the x positions of vrules are stored in
327      % \tabH@<tabcount>list with distinct values
328      \protected\def\tabH@aux@vrule#1#2{%
329        \@ifundefined{tabH@#1list}{%
330          \expandafter\xdef\csname tabH@#1list\endcsname{%
331            \noexpand\do{#2}%
332          }%
333        }{%
334          \begingroup
335            \def\x{#2}%
336            \let\y\@undefined
337            \let\do\tabH@do@add
338            \expandafter\xdef\csname tabH@#1list\endcsname{%
339              \csname tabH@#1list\endcsname\@empty
340              \ifx\y\@undefined
341                \noexpand\do{\x}%
342              \fi
343            }%
344          \endgroup
345        }%
346      }%
347      \def\tabH@do@add#1{%
348        \ifx\y\@undefined
349          \ifnum#1<\x\space
350          \else
351            \expandafter\ifx\csname y\endcsname\relax\fi
352            \ifnum#1>\x\space
353              \noexpand\do{\x}%
354            \fi
355          \fi
356        \fi
357        \noexpand\do{#1}%
358      }%
359
360      \def\tabH@vspace@start#1{%
361        \if@filesw
362          \stepcounter{tabH@unique}%
363          \edef\tabH@currentrow{\the\c@tabH@unique}%
364          \pdfsavepos
365          \protected@write\@auxout{%
366            \let\tabH@lastxpos\relax
367            \let\tabH@lastypos\relax
368          }{%
369            \tabH@aux@vstart{\tabH@currenttab}{\tabH@currentrow}%
370                           {\tabH@lastxpos}{\tabH@lastypos}%
371          }%
372        \fi
373        \begingroup
374          \edef\a{tabH@\tabH@currenttab row\tabH@currentrow}%
```

```
375      \expandafter\let\expandafter\x\csname\a x\endcsname
376      \ifx\x\relax
377      \else
378        \expandafter\let\expandafter\y\csname\a y\endcsname
379        \expandafter\let\expandafter\l
380            \csname tabH@\tabH@currenttab list\endcsname
381        \ifx\l\relax
382        \else
383          \def\f{#1}%
384          \ifx\f\@empty
385            \let\do\tabH@do@set
386          \else
387            \count@=\z@
388            \let\do\tabH@do@filter
389          \fi
390          \setbox\z@=\hbox{\l}%
391          \wd\z@=\z@
392          \dp\z@=\z@
393          \copy\z@
394        \fi
395      \fi
396    \endgroup
397 }%
398 \def\tabH@vspace@stop{%
399    \if@filesw
400      \pdfsavepos
401      \protected@write\@auxout{%
402        \let\tabH@lastypos\relax
403      }{%
404        \tabH@aux@vstop{\tabH@lastypos}%
405      }%
406    \fi
407 }%
408 \def\tabH@do@set#1{%
409    \hbox to \z@{%
410      \hskip \dimexpr #1sp - \x sp\relax
411      \vrule \@width\arrayrulewidth
412            \@depth\dimexpr \y sp\relax
413      \hss
414    }%
415 }%
416 \def\tabH@do@filter{%
417    \@tempswafalse
418    \advance\count@\@ne
419    \@for\e:=\f\do{%
420      \ifnum\e=\count@
421        \@tempswatrue
422      \fi
423    }%
424    \if@tempswa
425      \expandafter\tabH@do@set
426    \else
427      \expandafter\@gobble
428    \fi
429 }%
430
431 \protected\def\tabH@aux@vstart#1#2#3#4{%
432    \def\tabH@current@vstart{{#1}{#2}{#3}{#4}}%
433 }%
434 \protected\def\tabH@aux@vstop{%
435    \expandafter\tabH@aux@v\tabH@current@vstart
436 }%
```

```
437    \def\tabH@aux@v#1#2#3#4#5{%
438      \expandafter\gdef\csname tabH@#1row#2x\endcsname{#3}%
439      \expandafter\xdef\csname tabH@#1row#2y\endcsname{%
440        \the\numexpr #4 - #5\relax
441      }%
442    }%
443
444    \csname fi\endcsname
445    \endinput
446
447  \fi
```

2.5 DVI drivers

```
448  \ifx\tabH@driver\@empty
449    \PackageError{tabularht}{%
450      Missing DVI driver, option `vlines' disabled%
451    }{%
452      Supported DVI drivers: dvips.%
453    }%
454    \expandafter\endinput
455  \fi
456
457  \def\tabH@driver@dvips{%
458    \def\tabH@literalps##1{\special{ps:SDict begin ##1 end}}%
459    \def\tabH@headerps##1{\special{! ##1}}%
460  }
461
462  \@onelevel@sanitize\tabH@driver
463  \@ifundefined{tabH@driver@\tabH@driver}{%
464    \PackageError{tabularht}{%
465      Unsupported driver `\tabH@driver'%
466    }{%
467      Supported DVI drivers: dvips.%
468    }%
469    \endinput
470  }{}
471
472  \begingroup
473    \let\on@line\@empty
474    \PackageInfo{tabularht}{%
475      Using driver `\tabH@driver'%
476    }%
477  \endgroup
478  \csname tabH@driver@\tabH@driver\endcsname
479
480  \protected\def\tabH@vrule#1#2\vrule#3\arrayrulewidth{%
481    #2% \fi or empty
482    % hack to get rid of maxdrift rounding of dvips,
483    % thus simulate a large motion
484    \kern1in\relax
485    \tabH@literalps{%
486      #1 tabH.vrule %
487      Resolution neg 0 translate%
488    }%
489    \vrule#3\arrayrulewidth
490    \tabH@literalps{Resolution 0 translate}%
491    \kern-1in\relax
492  }
493
494  \def\tabH@vspace@start#1{%
495    \begingroup
496      \let\y\@empty
```

```
497    \@for\x:=#1\do{%
498      \ifx\y\@empty
499        \edef\y{\x}%
500      \else
501        \edef\y{\y\space\x}%
502      \fi
503    }%
504    \tabH@literalps{\tabH@currenttab[\y]currentpoint exch pop}%
505  \endgroup
506 }
507 \def\tabH@vspace@stop{%
508   \tabH@literalps{%
509     currentpoint exch pop %
510     \number\dimexpr\arrayrulewidth\relax\space
511     tabH.vspace%
512   }%
513 }
514
515 \tabH@headerps{%
516   userdict begin%
517     /tabH.list 10 dict def%
518     /tabH.job [] def %
519   end%
520   /tabH.vrule{%
521     10 string cvs cvn dup tabH.list exch known{%
522       tabH.list exch dup [ exch tabH.list exch get %
523       currentpoint pop round exch true exch{%
524         % tabH.list key [ ... x true i
525         % tabH.list key [ ... false i
526         exch{%
527           % ... [ ... x i
528           2 copy lt{false}{%
529             2 copy eq{pop false}{exch true}ifelse%
530           }ifelse%
531         }{false}ifelse%
532       }forall %
533       pop%
534       ]put%
535     }{%
536       tabH.list exch[currentpoint pop round]put%
537     }ifelse%
538   }bind def%
539   % <tab num> <cols array> <ytop> <ybottom> <rulewidth[sp]>
540   /tabH.vspace{%
541     userdict begin %
542       10 dict dup begin %
543         exch 65536 div Resolution mul 72.27 div %
544         % dvips uses a poor man's ceil function
545         % see dopage.c before "drawrule": (int)(... + 0.9999999)
546         0.9999999 add truncate%
547         /rulewidth exch def %
548         exch/ybottom exch def %
549         exch/ytop exch def %
550         exch/cols exch def %
551         exch/tabkey exch 10 string cvs cvn def %
552       end%
553       /tabH.job exch[exch userdict/tabH.job get aload pop]def %
554     end%
555   }bind def %
556   % Now we do the work at the end of the page.
557   % Unhappily "eop-hook" cannot be used, because "eop"
558   % executes "restore" before, so that all data are lost.
```

```
559   TeXDict begin%
560     /eop%
561     [%
562       {%
563         tabH.job{%
564           begin%
565            /colarray %
566              tabH.list tabkey known{tabH.list tabkey get}{[]}ifelse %
567            def %
568            cols length 0 eq not{%
569              /colarray[%
570                cols{1 sub %
571                  dup 0 lt{pop}{%
572                    dup colarray length ge{pop}{%
573                      colarray exch get%
574                    }ifelse%
575                  }ifelse%
576                }forall%
577              ]def%
578            }if %
579            colarray{%
580              % (rulewidth) == rulewidth == % debug
581              Resolution sub %
582              ytop rulewidth ytop ybottom sub v%
583            }forall %
584          end%
585        }forall%
586        % tabH.list{== ==}forall % debug
587      }bind aload pop %
588      TeXDict /eop get aload pop%
589    ]cvx def %
590  end%
591 }
```

592 ⟨/package⟩

3 Installation

3.1 Download

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

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

CTAN:macros/latex/contrib/oberdiek/tabularht.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.

3.2 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
```

---

[1] ftp://ftp.ctan.org/tex-archive/

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/
```

3.3 Package installation

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

```
tex tabularht.dtx
```

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

```
tabularht.sty          → tex/latex/oberdiek/tabularht.sty
tabularht.pdf          → doc/latex/oberdiek/tabularht.pdf
tabularht-example1.tex → doc/latex/oberdiek/tabularht-example1.tex
tabularht-example2.tex → doc/latex/oberdiek/tabularht-example2.tex
tabularht.dtx          → source/latex/oberdiek/tabularht.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.

3.4 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`.

3.5 Some details for the interested

Attached source. The PDF documentation on CTAN also includes the `.dtx` source file. It can be extracted by AcrobatReader 6 or higher. Another option is pdftk, e.g. unpack the file into the current directory:

```
pdftk tabularht.pdf unpack_files output .
```

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{tabularht.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 tabularht.dtx
makeindex -s gind.ist tabularht.idx
pdflatex tabularht.dtx
makeindex -s gind.ist tabularht.idx
pdflatex tabularht.dtx
```

4 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 `tabularht.xml`.

```
593 ⟨*catalogue⟩
594 <?xml version='1.0' encoding='us-ascii'?>
595 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
596 <entry datestamp='$Date$' modifier='$Author$' id='tabularht'>
597   <name>tabularht</name>
598   <caption>Tabular environments with height specified.</caption>
599   <authorref id='auth:oberdiek'/>
600   <copyright owner='Heiko Oberdiek' year='2005-2007'/>
601   <license type='lppl1.3'/>
602   <version number='2.5'/>
603   <description>
604     The tabularht package defines some environments that add a height
605     specification to tabular and array environments.  The default set
606     of new environments take a value for their height in the first
607     argument: defined environments are: <tt>tabularht</tt>,
608     <tt>tabularht*</tt> and <tt>arrayht</tt>.  If package
609     <xref refid='tabularx'>tabularx</xref> is also loaded,
610     the package also defines environments <tt>tabularxht</tt> and
611     <tt>tabularxht*</tt>.
612     <p/>
613     The places where stretching is to happen are signalled by<br/>
614     <tt>\noalign{\vfill}</tt><br/>
615     immediately after the <tt>\\</tt> that ends a row of the table or
616     array.
617     <p/>
618     The package is part of the <xref refid='oberdiek'>oberdiek</xref> bundle.
619   </description>
620   <documentation details='Package documentation'
621      href='ctan:/macros/latex/contrib/oberdiek/tabularht.pdf'/>
622   <ctan file='true' path='/macros/latex/contrib/oberdiek/tabularht.dtx'/>
623   <miktex location='oberdiek'/>
624   <texlive location='oberdiek'/>
625   <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'/>
626 </entry>
627 ⟨/catalogue⟩
```

5 History

[2005/09/22 v1.0]

- First public version.

[2005/10/16 v2.0]

- Height specification allows `to=...` or `spread=...`, default is `to=`.

- Option `vlines` added, drivers `pdftex` and `dvips`.

- `\interrowspace`, `\interrowfil`, and `\interrowstart…\interrowstop`
  added.

[2005/10/18 v2.1]

- Fix for package colortbl, but the colors of colortbl remain unsupported.

[2006/02/20 v2.2]

- Code is not changed.

- DTX framework.

[2006/12/22 v2.3]

- Documentation fix.

- Fix in code of option vlines.

[2007/03/21 v2.4]

- Fix: Counter `tabh@unique` must not be changed by `\include`.

[2007/04/11 v2.5]

- Line ends sanitized.

6 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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