

The **tabularht** package

Heiko Oberdiek*
<heiko.oberdiek at googlemail.com>

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Abstract

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

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

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}{|1|1|}  
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 $\langle list \rangle$. $\langle list \rangle$ is a comma separated list of numbers, $\langle height \rangle$ 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: pdft \TeX 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 La \TeX 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 $\text{\LaTeX}/\text{dvips}$ run is sufficient for this option.

Other drivers:

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

V \TeX : 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 `\@C@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 */
```

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}{|1|1|}%
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 [2016/05/16 v2.6 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{\vcenter{#1}\fi}\fi\bgroup\#2\sharp\#3\#4\@nil{%
57 \endgroup
58 \gdef\@array[\#\#1]\#\#2{%
59   \tabH@array@init
60   \#\#1%
61   \vcenter{#1}\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 original 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 }

```

```

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

```

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{pdftopage}{%
255   \PackageError{tabularht}{%
256     Your pdfTeX is too old%
257   }{%
258     \string\pdftopage\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{\%
272 \if@filesw
273   \pdftopage
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\@{tabH@\tabH@currenttab row\tabH@currentrow}%

```

```

375  \expandafter\let\expandafter\x\csname\@x\endcsname
376  \ifx\x\relax
377  \else
378  \expandafter\let\expandafter\y\csname\@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@lasttypo\relax
403 }{%
404  \tabH@aux@vstop{\tabH@lasttypo}%
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       lput%
535     }{%
536       tabH.list exch[currentpoint pop round]put%
537     }ifelse%
538   }bind def%
539 % <tab num> <cols array> <ytop> <ybottom> <rulerwidth[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     /rulerwidth 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 getaload 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 
```

3 Installation

3.1 Download

Package. This package is available on CTAN¹:

[CTAN:macros/latex/contrib/oberdiek/tabularht.dtx](http://ctan.org/pkg/tabularht) The source file.

[CTAN:macros/latex/contrib/oberdiek/tabularht.pdf](http://ctan.org/pkg/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](http://ctan.org/pkg/oberdiek.tds.zip)

TDS refers to the standard “A Directory Structure for TeX Files” ([CTAN:tds/tds.pdf](http://ctan.org/pkg/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<http://ctan.org/pkg/tabularht>

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):

<code>tabularht.sty</code>	→ <code>tex/latex/oberdiek/tabularht.sty</code>
<code>tabularht.pdf</code>	→ <code>doc/latex/oberdiek/tabularht.pdf</code>
<code>tabularht-example1.tex</code>	→ <code>doc/latex/oberdiek/tabularht-example1.tex</code>
<code>tabularht-example2.tex</code>	→ <code>doc/latex/oberdiek/tabularht-example2.tex</code>
<code>tabularht.dtx</code>	→ <code>source/latex/oberdiek/tabularht.dtx</code>

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

Unpacking with L^AT_EX. The `.dtx` chooses its action depending on the format:

plain TeX: Run `docstrip` and extract the files.

L^AT_EX: Generate the documentation.

If you insist on using L^AT_EX for `docstrip` (really, `docstrip` does not need L^AT_EX), 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 pdfL^AT_EX:

```
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='lpp1.3' />
602   <version number='2.6' />
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.

[2016/05/16 v2.6]

- Documentation updates.

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