

# The **tabularht** package

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## Abstract

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

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## 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 `<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  $\varepsilon$ -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 is used to get the line positions. The lines are then drawn at the end of the page. Thus one L<sup>A</sup>T<sub>E</sub>X/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}{10{\extracolsep{\fill}}r}%
8     upper left corner & upper right corner\\%
9     \noalign{\vfill}\%\\%
10    \multicolumn{2}{c}{\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 specification (HO)]

```

### 2.1 Environments

```

51 \let\@toarrayheight\@empty
52 \let\tabH@array@init\@empty
53
54 \toks@=%
55   \begingroup
56     \long\def\x{\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 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{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             \let\tabH@aux@vrule\@gobbletwo
314             \let\tabH@aux@vstart\@gobblefour
315             \let\tabH@aux@vstop\@gobble
316         }%
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   \onelevel@sanitize\tabH@driver
462 \Qifundefined{tabH@driver@\tabH@driver}{%
463   \PackageError{tabularht}{%
464     Unsupported driver '\tabH@driver'%
465   }{%
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@literalalps{\tabH@currenttab[\y]currentpoint exch pop}%
505  \endgroup
506 }
507 \def\tabH@vspace@stop{%
508   \tabH@literalalps{%
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> <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 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 </package>

```

## 3 Installation

### 3.1 Download

**Package.** This package is available on CTAN<sup>1</sup>:

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

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

*TDS* refers to the standard “A Directory Structure for TeX Files” ([CTAN:tds/tds.pdf](http://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
```

**Script installation.** Check the directory `TDSScripts/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/
```

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<sup>1</sup>[ftp://ftp.ctan.org/tex-archive/](http://ftp.ctan.org/tex-archive/)

### 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

**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 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 `dvi`.
- `\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.

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