

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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*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 *<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 is 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}{0{}1@{\extracolsep{\fill}}r@{}}
8    upper left corner & upper right corner\\%
9    \noalign{\vfill}%
10   \multicolumn{2}{c@{}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}{|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\fi\fi\bgroup\#2\sharp\#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   \begin{tabular}
123 }{%
124   \end{tabular}
125 }
126
127 \newenvironment{tabularht*}[1]{%
128   \tabH@setheight{#1}%
129   \nameuse{tabular*}%
130 }{%
131   \nameuse{endtabular*}%
132 }
133
134 \newenvironment{tabularrhtx}[1]{%
135   \tabH@setheight{#1}%
136   \begin{tabularx}
137 }{%
138   \end{tabularx}
139 }
140
141 \newenvironment{arrayht}[1]{%
142   \tabH@setheight{#1}%
143   \begin{array}
144 }{%
145   \end{array}
146 }
147
148 \def\interrowspace{%
149   \noalign\begin{array}{@{}c@{}}
150     \tabH@interrowspace
151   \end{array}%
152 }
153 \newcommand*\tabH@interrowspace[2][]{%
154   \vspace{#1}\vspace{#2}%
155 }
156 \def\interrowfill{%
157   \noalign\begin{array}{@{}c@{}}
158     \tabH@interrowfill
159   \end{array}%
160 }
161 \newcommand*\tabH@interrowfill[1][]{%
162   \vspace{#1}\vfill%
163 }
164 \def\tabH@vspace#1#2{%
165   \vspace{#1}\vspace{#2}%
166   \vspace{#2}%
167   \vspace{#1}%
168 }
169 \let\tabH@vspace@start\gobble
170 \let\tabH@vspace@stop\empty

```

```

171
172 \newcommand*{\interrowstart}{%
173   \noalign\hgroup
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   \Qifundefined{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\relax
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 \def\tabH@lastxpos{\the\pdflastxpos}%
282 \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 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@ \one
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 \protected\def\tabH@aux@vstart#1#2#3#4{%
431   \def\tabH@current@vstart{{#1}{#2}{#3}{#4}}%
432 }%
433 \protected\def\tabH@aux@vstop{%
434   \expandafter\tabH@aux@v\tabH@current@vstart
435 }%
436 \def\tabH@aux@v#1#2#3#4#5{%
437   \expandafter\gdef\csname tabH@#1row#2x\endcsname{#3}%
438   \expandafter\xdef\csname tabH@#1row#2y\endcsname{%
439     \the\numexpr #4 - #5\relax
440   }%
441 }%
442 }%
443 \csname fi\endcsname
444 \endinput
445
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 @onelvel@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 </package>

```

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/install/macros/latex/contrib/oberdiek.tds.zip)

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

¹<http://ctan.org/pkg/tabularht>

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

plain T_EX: 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 `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='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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