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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			15
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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} \to height is 1in \\ begin{tabularht}{to=1in} \to height is 1in \\ begin{tabularht}{spread=0pt} \to natural height, same as \begin{tabular}{begin{tabularht}{spread=1in}} \to natural height increased by 1in \\ \end{tabular}
```

Hint: See also package tabularky, 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 in between \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 [\langle list \rangle] \{\langle height \rangle\} \interrowfill [\langle list \rangle] \interrowstart [\langle list \rangle] ... \interrowstop
```

Option vlines is driver dependent and uses ε -T_EX 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.

VT_EX: 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}
5 \begin{document}
6 \fbox{%
   upper left corner & upper right corner\\%
8
9
     \noalign{\vfill}%
     \mbox{multicolumn{2}{0{}}c0{}}{bounding box}\%
10
     \noalign{\vfill}%
11
12
     lower left corner & lower right corner\\%
   \end{tabularht*}%
13
14 }
15 \end{document}
16 (/example1)
```

1.4.2 Example 2

```
17 (*example2)
18 \documentclass{article}
19 \usepackage{booktabs}
20 \usepackage[dvips,vlines]{tabularht}
22 \begin{document}
23
25
    \hline
26 First&Line\\%
    \hline
27
28 \interrowstart
29 \addlinespace[10mm]%
30 \interrowstop
31 \hline
32 Second&Line\\%
33 \interrowstart
34 \hline
35 \hline
36 \setminus interrowstop
37 Third&Line\\%
    \hline
38
39 \interrowspace{10mm}
    \hline
40
    Fourth&Line\\%
    \hline
43 \end{tabularht}
44
45 \end{document}
46 (/example2)
     Implementation
47 (*package)
Package identification.
48 \NeedsTeXFormat{LaTeX2e}
49 \ProvidesPackage{tabularht}%
     [2019/12/29 v2.7 Tabular with height specified (HO)]
2.1
      Environments
51 \let\@toarrayheight\@empty
52 \let\tabH@array@init\@empty
54 \toks@={%
55
     \begingroup
       \label{longdef} $$  \log\ef\x#1\vcenter\fi\fi\bgroup#2\@sharp#3#4\@nil{%} $$
56
57
         \endgroup
         \gdef\@array[##1]##2{%
58
           \tabH@array@init
59
           #1%
60
           \vcenter\fi\fi
61
           \@toarrayheight
62
63
           \bgroup
           \let\@toarrayheight\@empty
64
65
           #2\@sharp###3#4%
         }%
66
67
     \expandafter\x\@array[#1]{#2}\@nil % hash-ok
68
69 }
70 \edef\tabH@patch@array{\the\toks@}
71 \def\tabH@patch@@array{%
```

72 \ifx\@array\@@array

```
\def\reserved@a{\let\@@array\@array}%
 73
 74
     \else
       \let\reserved@a\relax
 75
     \fi
 76
 77
     \tabH@patch@array
 78
     \reserved@a
 79 }
 80 \tabH@patch@@array
81
 82 \@ifpackageloaded{array}{}{%
     \AtBeginDocument{%
 83
       \@ifpackageloaded{array}{%
 84
         \tabH@patch@@array
 85
       }{}%
 86
     }%
 87
 88 }
 89
 90 \def\tabH@setheight#1{%
     \tabH@@setheight#1==\@nil
91
92 }
93 \def\tabH@0setheight#1=#2=#3\0ni1{\%
     \ifx\\#2#3\\%
94
       \setlength{\dimen@}{#1}%
 95
       \edef\@toarrayheight{to\the\dimen@}%
 96
 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
            \PackageError{tabularht}{%
103
              Unknown height specifier %
104
105
              '\expandafter\strip@prefix\meaning\tabH@temp'%
           }{%
106
              The height dimension for tabular height can be prefixed%
107
108
              \MessageBreak
109
              with 'to=' or 'spread=', default is 'to='.%
110
           }%
111
            \let\tabH@temp\tabH@to
         \fi
112
       \fi
113
       \left\langle \right\} 
114
       \edef\@toarrayheight{\tabH@temp\the\dimen@}%
115
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
120 \newenvironment{tabularht}[1]{%
     \tabH@setheight{#1}%
121
122
     \tabular
123 }{%
     \endtabular
124
125 }
126
127 \newenvironment{tabularht*}[1]{%
     \tabH@setheight{#1}%
128
     \@nameuse{tabular*}%
129
130 }{%
     \@nameuse{endtabular*}%
131
132 }
```

```
133
134 \newenvironment{tabularhtx}[1]{%
     \tabH@setheight{#1}%
135
     \tabularx
137 }{%
138
    \endtabularx
139 }
140
141 \newenvironment{arrayht}[1]{%
142 \tabH@setheight{#1}%
143 \array
144 }{%
    \endarray
145
146 }
148 \def\interrowspace{%
    \noalign\bgroup
       \tabH@interrowspace
150
151 }
152 \newcommand*{\tabH@interrowspace}[2][]{%
       \tabH@vspace{#1}{#2}%
153
154
     \egroup
155 }
156 \def\interrowfill{%
     \noalign\bgroup
158
       \tabH@interrowfill
159 }
160 \newcommand*{\tabH@interrowfill}[1][]{%
       \tabH@vspace{#1}{\fill}%
162
     \egroup
163 }
164 \def\tabH@vspace#1#2{%
165
    \tabH@vspace@start{#1}%
    \vspace{#2}%
166
167 \tabH@vspace@stop
168 }
169 \let\tabH@vspace@start\@gobble
170 \let\tabH@vspace@stop\@empty
172 \newcommand*{\interrowstart}{%
173 \noalign\bgroup
       \tabH@interrowstart
174
175 }
176 \newcommand*{\tabH@interrowstart}[1][]{%
       \tabH@vspace@start{#1}%
178
     \egroup
179 }
180 \newcommand*{\interrowstop}{%
    \noalign{\tabH@vspace@stop}%
182 }
2.2
      Options
183 \providecommand*{\tabH@driver}{}
185 \DeclareOption{vlines}{\%}
186 \let\tabH@temp\relax
187 }
188 \DeclareOption{pdftex}{}
189 \DeclareOption{dvips}{%
     \def\tabH@driver{dvips}%
191 }
192 \ProcessOptions*\relax
```

```
193
194 \ifx \ensuremath{\mbox{tabH@temp\relax}}
195 \else
196 \expandafter\endinput
197 \fi
198
199 \begingroup
200
     \@ifundefined{eTeXversion}{%
       \PackageError{tabularht}{%
201
         Option 'vlines' requires eTeX%
202
       }{%
203
         Use of eTeX is recommended for LaTeX, see ltnews16.%
204
       }%
205
       \endgroup
206
207
       \endinput
208
    }{}%
209 \endgroup
      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{%
     \ifx\@toarrayheight\@empty
218
       % ignore vertical lines of nested tabular environments
219
       \let\tabH@currenttab\@empty
220
     \else
221
       \stepcounter{tabH@unique}%
       \edef\tabH@currenttab{\the\c@tabH@unique}%
222
     \fi
223
224 }
225
226 \renewcommand*{\@arrayrule}{%
     \@addtopreamble{%
227
228
       \hskip -.5\arrayrulewidth
229
       \ifx\tabH@currenttab\@empty
230
          \tabH@vrule{\tabH@currenttab}%
231
       \fi
232
       \begingroup
233
         \expandafter\ifx\csname CT@arc@\endcsname\relax
234
         \else
235
236
            \expandafter\CT@arc@
         \fi
237
         \vline
238
239
       \endgroup
240
       \hskip -.5\arrayrulewidth
241
     }%
242 }
243 \let\tabH@arrayrule\@arrayrule
244 \AtBeginDocument{%
    \@ifpackageloaded{colortbl}{%
245
246
       \let\@arrayrule\tabH@arrayrule
247
     }{}%
248 }
```

2.4 Driver pdftex

250 \let\tabH@vrule\@gobble

```
251 \RequirePackage{iftex}[2019/11/07]
252 \ifpdf
253
            \begingroup
                \@ifundefined{pdfsavepos}{%
254
255
                    \PackageError{tabularht}{%
256
                         Your pdfTeX is too old%
257
258
                         \string\pdfsavepos\space is missing.%
                    }%
259
                     \endgroup
260
                     \csname fi\endcsname
261
                     \endinput
262
263
                }{}%
264
                \let\on@line\@empty
265
                \PackageInfo{tabularht}{%
266
267
                    Using driver 'pdftex' because of pdfTeX in PDF mode%
268
                }%
           \endgroup
269
270
            \protected\def\tabH@vrule#1{%
271
                \if@filesw
272
273
                     \pdfsavepos
                     \protected@write\@auxout{%
274
                         \let\tabH@lastxpos\relax
275
276
                         \tabH@aux@vrule{#1}{\tabH@lastxpos}%
277
                    }%
278
                \fi
279
           }%
280
281
282
            \def\tabH@lastxpos{\the\pdflastxpos}%
283
            \def\tabH@lastypos{\the\pdflastypos}%
284
           % The .aux file contains three commands:
285
           % \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
           \AtBeginDocument{%
290
                \mbox{\ensuremath{\mbox{\%}}} The .aux files are read the first time before
291
292
                % \AtBeginDocument and later at \end{document}.
                % \tabH@aux@done is a marker to distinguish
293
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
                         \Opercentchar\Opercentchar BeginProlog: tabularht%
                    }%
300
                    \mbox{\ensuremath{\mbox{\%}}} items in the aux file are executed,
301
302
                    % if tabularht is loaded
                    % and during the aux file read at \begin{document} only
303
304
                     \immediate\write\@mainaux{%
305
                         \detokenize{%
306
                             % the \tabH@aux@... commands are needed only if
307
                             % tabularht is loaded with driver pdftex.
308
                             \verb|\diffunctione| \end{tabH@aux@vrule} \end{tabH@a
309
                              {%
                                  % disable commands except for the first .aux files reading
310
                                  \@ifundefined{tabH@aux@done}\@gobble\@firstofone
311
                             }%
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{%
            \Opercentchar\Opercentchar EndProlog: tabularht%
321
         }%
322
       \fi
323
     }%
324
325
     % the x positions of vrules are stored in
326
     % \tabH@<tabcount>list with distinct values
327
328
     \protected\def\tabH@aux@vrule#1#2{%
329
       \@ifundefined{tabH@#1list}{%
          \expandafter\xdef\csname tabH@#1list\endcsname{%
330
            \noexpand\do{\#2}%
331
332
         }%
       }{%
333
          \begingroup
334
            \left( x{\#2}\right) 
335
            \let\y\@undefined
336
            \let\do\tabH@do@add
337
338
            \expandafter\xdef\csname tabH@#1list\endcsname{%
339
              \csname tabH@#1list\endcsname\@empty
340
              \ifx\y\@undefined
341
                \noexpand\do{x}
             \fi
342
           }%
343
344
         \endgroup
345
       }%
     }%
346
     \def\tabH@do@add#1{%
347
348
       \ifx\y\@undefined
349
         \ifnum#1<\x\space
350
351
            \expandafter\ifx\csname y\endcsname\relax\fi
            352
              \noexpand\do{x}%
353
354
            \fi
         \fi
355
356
357
       \noexpand\do{\#1}%
358
359
360
     \def\tabH@vspace@start#1{%
361
       \if@filesw
362
          \stepcounter{tabH@unique}%
         \edef\tabH@currentrow{\the\c@tabH@unique}%
363
364
         \pdfsavepos
          \protected@write\@auxout{%
365
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
         }%
       \fi
372
       \begingroup
373
         \edef\a{tabH@\tabH@currenttab row\tabH@currentrow}%
374
```

```
\expandafter\let\expandafter\x\csname\a x\endcsname
375
          \int x x \cdot x
376
          \else
377
            \expandafter\let\expandafter\y\csname\a y\endcsname
378
379
            \expandafter\let\expandafter\l
380
                \csname tabH@\tabH@currenttab list\endcsname
381
            \inf x \leq x
382
            \else
              \left\{ f^{\#1}\right\}
383
              \ifx\f\@empty
384
                \let\do\tabH@do@set
385
              \else
386
                \count@=\z@
387
                \let\do\tabH@do@filter
388
              \fi
389
390
              \schox\z@=\hbox{\1}%
391
              \wd\z0=\z0
              dp\z0=\z0
392
              \copy\z@
393
394
            \fi
         \fi
395
       \endgroup
396
397
     \def\tabH@vspace@stop{%
398
       \if@filesw
399
400
          \pdfsavepos
          \protected@write\@auxout{%
401
            \let\tabH@lastypos\relax
402
403
            \tabH@aux@vstop{\tabH@lastypos}%
404
         }%
405
406
       \fi
     }%
407
     \def\tabH@do@set#1{%
408
       \hbox to z@{%}
409
         \hskip \dimexpr #1sp - \x sp\relax
410
411
         \vrule \@width\arrayrulewidth
412
                 \@depth\dimexpr \y sp\relax
413
         \hss
       }%
414
     }%
415
     \def\tabH@do@filter{%
416
       \@tempswafalse
417
418
       \advance\count@\@ne
419
       \ensuremath{\texttt{Qfor}\e:=\f\\do{\%}}
420
         \ifnum\e=\count@
421
            \@tempswatrue
422
         \fi
423
       }%
424
       \if@tempswa
         \expandafter\tabH@do@set
425
426
       \else
         \expandafter\@gobble
427
       \fi
428
     }%
429
430
431
     \protected\def\tabH@aux@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
                        \theta = 44 - 45 
440
441
                  }%
442
            }%
443
444
             \csname fi\endcsname
             \endinput
445
446
447 \fi
2.5
               DVI drivers
448 \ifx\tabH@driver\@empty
            \PackageError{tabularht}{%
449
450
                 Missing DVI driver, option 'vlines' disabled%
451
                  Supported DVI drivers: dvips.%
452
453
            }%
             \expandafter\endinput
454
455 \fi
456
457 \ensuremath{\mbox{\sc def}\mbox{\sc de
            \def\tabH@literalps##1{\special{ps:SDict begin ##1 end}}%
458
             \def\tabH@headerps##1{\special{! ##1}}%
459
460 }
462 \@onelevel@sanitize\tabH@driver
463 \@ifundefined{tabH@driver@\tabH@driver}{%
464
            \PackageError{tabularht}{%
                  Unsupported driver '\tabH@driver'%
465
466
            }{%
                  Supported DVI drivers: dvips.%
467
            }%
468
             \endinput
469
470 }{}
471
472 \begingroup
473
            \let\on@line\@empty
474
             \PackageInfo{tabularht}{%
                  Using driver '\tabH@driver'%
475
            }%
476
477 \endgroup
478 \csname tabH@driver@\tabH@driver\endcsname
480 \protected\def\tabH@vrule#1#2\vrule#3\arrayrulewidth{%
          #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{%
                 #1 tabH.vrule %
486
                 Resolution neg 0 translate%
487
            }%
488
             \vrule#3\arrayrulewidth
489
490
            \tabH@literalps{Resolution 0 translate}%
491
             \kern-1in\relax
492 }
493
494 \def\tabH@vspace@start#1{%
495
            \begingroup
```

496

\let\y\@empty

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

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

3 Installation

3.1 Download

Package. This package is available on CTAN¹:

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:pkg/tds). 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
```

¹CTAN: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 T_FX :

```
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):

```
\begin{tabular}{ll} tabularht.sty & $\to$ tex/latex/oberdiek/tabularht.sty \\ tabularht.pdf & $\to$ doc/latex/oberdiek/tabularht.pdf \\ tabularht-example1.tex & $\to$ doc/latex/oberdiek/tabularht-example1.tex \\ tabularht-example2.tex & $\to$ doc/latex/oberdiek/tabularht-example2.tex \\ tabularht.dtx & $\to$ source/latex/oberdiek/tabularht.dtx \\ \end{tabular}
```

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 T_EX distribution (T_EX Live, MiKT_EX, ...) relies on file name databases, you must refresh these. For example, T_EX Live users run texhash or mktexlsr.

3.5 Some details for the interested

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

plain TEX: Run docstrip and extract the files.

LATEX: Generate the documentation.

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

```
latex \let\install=y\input{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 pdfIATEX:

```
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 dvips.
- \bullet \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]

 \bullet 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.

[2019/12/29 v2.7]

• Use \iftex package.

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