

The `tabularkv` package

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Abstract

This package adds a key value interface for tabular by the new environment `tabularkv`. Thus the \TeX source code looks better by named parameters, especially if package `tabularht` is used.

Contents

| | |
|---|----------|
| 1 Usage | 1 |
| 1.1 Example | 2 |
| 2 Implementation | 2 |
| 3 Installation | 3 |
| 3.1 Download | 3 |
| 3.2 Bundle installation | 3 |
| 3.3 Package installation | 3 |
| 3.4 Refresh file name databases | 3 |
| 3.5 Some details for the interested | 4 |
| 4 Catalogue | 4 |
| 5 History | 5 |
| [2005/09/22 v1.0] | 5 |
| [2006/02/20 v1.1] | 5 |
| [2016/05/16 v1.2] | 5 |
| 6 Index | 5 |

1 Usage

`\usepackage{tabularkv}`

The package provides the environment `tabularkv` that takes an optional argument with tabular parameters:

width: width specification, ”tabular*” is used.

x: width specification, `tabularx` is used, package `tabularx` must be loaded.

height: height specification, see package `tabularht`.

valign: vertical positioning, this option is optional;
values: top, bottom, center.

Parameter `valign` optional, the following are equivalent:

```
\begin{tabularkv}[..., valign=top]{1}...\end{tabularkv}
\begin{tabularkv}[...][t]{1}...\end{tabularkv}
```

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

1.1 Example

```
1 <*example>
2 \documentclass{article}
3 \usepackage{tabularkv}
4
5 \begin{document}
6 \fbox{%
7   \begin{tabularkv}[
8     width=4in,
9     height=1in,
10    valign=center
11   ]{@{}l@{\extracolsep{\fill}}r@{}}
12   upper left corner & upper right corner\\
13   \noalign{\vfill}%
14   \multicolumn{2}{@{}c@{}}{bounding box}\\
15   \noalign{\vfill}%
16   lower left corner & lower right corner\\
17   \end{tabularkv}%
18 }
19 \end{document}
20 </example>
```

2 Implementation

```
21 <*package>
22 Package identification.
23 \NeedsTeXFormat{LaTeX2e}
24 \ProvidesPackage{tabularkv}%
25 [2016/05/16 v1.2 Tabular with key value interface (HO)]
26 \RequirePackage{keyval}
27 \RequirePackage{tabularht}
28
29 \let\tabKV@star@x\@empty
30 \let\tabKV@width\@empty
31 \let\tabKV@valign\@empty
32
33 \define@key{tabKV}{height}{%
34   \setlength{\dimen@}{#1}%
35   \edef\tarrayheight{to\the\dimen@}%
36 }
37 \define@key{tabKV}{width}{%
38   \def\tabKV@width{#1}%
39   \def\tabKV@star@x{*}%
40 }
41 \define@key{tabKV}{x}{%
42   \def\tabKV@width{#1}%
43   \def\tabKV@star@x{x}%
44 }
45 \define@key{tabKV}{valign}{%
46   \edef\tabKV@valign{[\@car #1c\@nil]}%
47 }
48 \newenvironment{tabularkv}[1][]{%
49   \setkeys{tabKV}{#1}%
50   \@nameuse{%
51     tabular\tabKV@star@x\expandafter\expandafter\expandafter
52     }%
53   \expandafter\tabKV@width\tabKV@valign
54 }{%
55   \@nameuse{endtabular\tabKV@star@x}%
56 }
57 </package>
```

3 Installation

3.1 Download

Package. This package is available on CTAN¹:

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

[CTAN:macros/latex/contrib/oberdiek/tabularkv.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 T_EX Files” ([CTAN:tds/tds.pdf](#)). Directories with `texmf` in their name are usually organized this way.

3.2 Bundle installation

Unpacking. Unpack the `oberdiek.tds.zip` in the TDS tree (also known as `texmf` tree) of your choice. Example (linux):

```
unzip oberdiek.tds.zip -d ~/texmf
```

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 T_EX:

```
tex tabularkv.dtx
```

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

```
tabularkv.sty      → tex/latex/oberdiek/tabularkv.sty
tabularkv.pdf     → doc/latex/oberdiek/tabularkv.pdf
tabularkv-example.tex → doc/latex/oberdiek/tabularkv-example.tex
tabularkv.dtx     → source/latex/oberdiek/tabularkv.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 T_EX distribution (teT_EX, miK_TE_X, ...) relies on file name databases, you must refresh these. For example, teT_EX users run `texhash` or `mktextlsr`.

¹<http://ctan.org/pkg/tabularkv>

3.5 Some details for the interested

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

4 Catalogue

The following XML file can be used as source for the [T_EX 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 `tabularkv.xml`.

```
57 (*catalogue)
58 <?xml version='1.0' encoding='us-ascii'?>
59 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
60 <entry datestamp='$Date$' modifier='$Author$' id='tabularkv'>
61   <name>tabularkv</name>
62   <caption>Tabular environments with key-value interface.</caption>
63   <authorref id='auth:oberdiek' />
64   <copyright owner='Heiko Oberdiek' year='2005,2006' />
65   <license type='lppl1.3' />
66   <version number='1.2' />
67   <description>
68     The tabularkv package creates an environment <tt>tabularkv</tt>, whose
69     arguments are specified in key-value form. The arguments chosen
70     determine which other type of tabular is to be used (whether
71     standard LATEX ones, or environments from the
72     <xref refid='tabularx'>tabularx</xref> or the
73     <xref refid='tabularht'>tabularx</xref> package).
74   <p/>
75   The package is part of the <xref refid='oberdiek'>oberdiek</xref> bundle.
76 </description>
77 <documentation details='Package documentation'
78   href='ctan:/macros/latex/contrib/oberdiek/tabularkv.pdf' />
79 <ctan file='true' path='/macros/latex/contrib/oberdiek/tabularkv.dtx' />
80 <miktex location='oberdiek' />
81 <texlive location='oberdiek' />
82 <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip' />
83 </entry>
84 </catalogue>
```

5 History

[2005/09/22 v1.0]

- First public version.

[2006/02/20 v1.1]

- DTX framework.
- Code is not changed.

[2016/05/16 v1.2]

- Documentation updates.

6 Index

Numbers written in *italics* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; plain numbers refer to the code lines where the entry is used.

| Symbols | | N | |
|------------------------------------|-----------------------|-------------------------------------|---------------------------|
| <code>\@car</code> | <i>45</i> | <code>\NeedsTeXFormat</code> | <i>22</i> |
| <code>\@empty</code> | <i>28, 29, 30</i> | <code>\newenvironment</code> | <i>47</i> |
| <code>\@nameuse</code> | <i>49, 54</i> | <code>\noalign</code> | <i>13, 15</i> |
| <code>\@nil</code> | <i>45</i> | P | |
| <code>\@toarrayheight</code> | <i>34</i> | <code>\ProvidesPackage</code> | <i>23</i> |
| <code>\@</code> | <i>12, 14, 16</i> | R | |
| B | | <code>\RequirePackage</code> | <i>25, 26</i> |
| <code>\begin</code> | <i>5, 7</i> | S | |
| D | | <code>\setkeys</code> | <i>48</i> |
| <code>\define@key</code> | <i>32, 36, 40, 44</i> | <code>\setlength</code> | <i>33</i> |
| <code>\dimen@</code> | <i>33, 34</i> | T | |
| <code>\documentclass</code> | <i>2</i> | <code>\tabKV@star@x</code> | <i>28, 38, 42, 50, 54</i> |
| E | | <code>\tabKV@valign</code> | <i>30, 45, 52</i> |
| <code>\end</code> | <i>17, 19</i> | <code>\tabKV@width</code> | <i>29, 37, 41, 52</i> |
| <code>\extracolsep</code> | <i>11</i> | <code>\the</code> | <i>34</i> |
| F | | U | |
| <code>\fbox</code> | <i>6</i> | <code>\usepackage</code> | <i>3</i> |
| <code>\fill</code> | <i>11</i> | V | |
| M | | <code>\vfill</code> | <i>13, 15</i> |
| <code>\multicolumn</code> | <i>14</i> | | |