

The `tabularkv` package

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Abstract

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

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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}
```

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 
```

2 Implementation

```
21 /*package*/
22 Package identification.
23 \NeedsTeXFormat{LaTeX2e}
24 \ProvidesPackage{tabularkv}%
25 [2006/02/20 v1.1 Tabular with key value interface (HO)]
26 \RequirePackage{keyval}
27 \RequirePackage{tabularht}
28 \let\tabKV@star@x\empty
29 \let\tabKV@width\empty
30 \let\tabKV@valign\empty
31
32 \define@key{tabKV}{height}{%
33   \setlength{\dimen@}{#1}%
34   \edef\@toarrayheight{to\the\dimen@}%
35 }
36 \define@key{tabKV}{width}{%
37   \def\tabKV@width{#1}%
38   \def\tabKV@star@x{*}%
39 }
40 \define@key{tabKV}{x}{%
41   \def\tabKV@width{#1}%
42   \def\tabKV@star@x{x}%
43 }
44 \define@key{tabKV}{valign}{%
45   \edef\tabKV@valign{[\@car #1\@nil]}%
46 }
47 \newenvironment{tabularkv}[1][]{%
48   \setkeys{tabKV}{#1}%
49   \nameuse{%
50     tabular\expandafter\expandafter\expandafter
51   }{%
52     \expandafter\expandafter\expandafter\expandafter\expandafter
53   }{%
54     \nameuse{endtabular\expandafter\expandafter\expandafter}%
55   }
56 
```

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 TeX 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 `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/
```

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 tabularkv.dtx
```

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

<code>tabularkv.sty</code>	→ <code>tex/latex/oberdiek/tabularkv.sty</code>
<code>tabularkv.pdf</code>	→ <code>doc/latex/oberdiek/tabularkv.pdf</code>
<code>tabularkv-example.tex</code>	→ <code>doc/latex/oberdiek/tabularkv-example.tex</code>
<code>tabularkv.dtx</code>	→ <code>source/latex/oberdiek/tabularkv.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`.

¹<ftp://ftp.ctan.org/tex-archive/>

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 tabularkv.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{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='1.1' />
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.

6 Index

Numbers written in italic 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.

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