# The tabularkv package

# Heiko Oberdiek\* <heiko.oberdiek at googlemail.com>

### 2016/05/16 v1.2

#### 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.

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# 1 Usage

### \usepackage{tabularkv}

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

 $\label{eq:width:$ 

**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:

 $<sup>{\</sup>rm *Please\ report\ any\ issues\ at\ https://github.com/ho-tex/oberdiek/issues}$ 

### 1.1 Example

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

# 2 Implementation

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

### 3 Installation

#### 3.1 Download

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

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 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 TFX:

```
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):

```
\begin{tabular}{ll} tabular kv. sty & \to tex/latex/oberdiek/tabular kv. sty \\ tabular kv. pdf & \to doc/latex/oberdiek/tabular kv. pdf \\ tabular kv-example. tex & \to doc/latex/oberdiek/tabular kv-example. tex \\ tabular kv. dtx & \to source/latex/oberdiek/tabular kv. 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 (te $T_EX$ , mik $T_EX$ , ...) relies on file name databases, you must refresh these. For example, te $T_EX$  users run texhash or mktexlsr.

<sup>&</sup>lt;sup>1</sup>http://ctan.org/pkg/tabularkv

#### 3.5 Some details for the interested

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

plain T<sub>E</sub>X: 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{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 pdfIAT<sub>E</sub>X:

```
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 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 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 65 65 100 

66
   <version number='1.2'/>
67
   <description>
    The tabularkv package creates an environment <tt>tabularkv</tt>, whose
    arguments are specified in key-value form. The arguments chosen
69
    determine which other type of tabular is to be used (whether
70
    standard LaTeX ones, or environments from the
71
    <xref refid='tabularx'>tabularx</xref> or the
72
    <xref refid='tabularht'>tabularx</xref> package).
73
    74
75
    The package is part of the xref refid='oberdiek'>oberdiek bundle.
76 </description>
77 <documentation details='Package documentation'
      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]

- $\bullet~$  DTX framework.
- Code is not changed.

# [2016/05/16 v1.2]

• Documentation updates.

### 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.

Symbols	${f N}$
\@car 45	\NeedsTeXFormat 22
\@empty 28, 29, 30	\newenvironment 47
\@nameuse 49, 54	\noalign 13, 15
\@nil 45	
\@toarrayheight 34	P
\\ 12, 14, 16	\ProvidesPackage
В	$\mathbf{R}$
\begin 5, 7	$\verb \RequirePackage  25, 26$
D	S
D	\setkeys
\dimen@	\setlength
\documentclass 2	(bestellen
(documentolabb	${f T}$
${f E}$	\tabKV@star@x 28, 38, 42, 50, 54
\end 17, 19	\tabKV@valign 30, 45, 52
\extracolsep 11	\tabKV@width 29, 37, 41, 52
	\the 34
${f F}$	
\fbox 6	$\mathbf{U}$
\fill 11	\usepackage 3
${f M}$	${f v}$
\multicolumn 14	\vfill 13, 15