The tabularkv package

Heiko Oberdiek*

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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.

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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.

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

Parameter valign optional, the following are equivalent:

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

1.1 Example

```
⟨*example⟩
\documentclass{article}
\usepackage{tabularkv}

\begin{document}
\fbox{%
  \begin{tabularkv}[
    width=4in,
    height=1in,
    valign=center
  ]{@{}l@{\extracolsep{\fill}}r@{}}
    upper left corner & upper right corner\\
    \noalign{\vfill}%
    \multicolumn{2}{@{}c@{}}{bounding box}\\
    \noalign{\vfill}%
    lower left corner & lower right corner\\
  \end{tabularkv}%
}
\end{document}
⟨/example⟩
```

2 Implementation

```
⟨*package⟩
```

Package identification.

```
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{tabularkv}%
  [2016/05/16 v1.2 Tabular with key value interface (HO)]
\RequirePackage{keyval}
\RequirePackage{tabularht}

\let\tabKV@star@x\@empty
\let\tabKV@width\@empty
\let\tabKV@valign\@empty

\define@key{tabKV}{height}{%
  \setlength{\dimen@}{#1}%
  \edef\@toarrayheight{to\the\dimen@}%
}
\define@key{tabKV}{width}{%
  \def\tabKV@width{{#1}}%
  \def\tabKV@star@x{*}%
}
\define@key{tabKV}{x}{%
  \def\tabKV@width{{#1}}%
  \def\tabKV@star@x{x}%
}
\define@key{tabKV}{valign}{%
  \edef\tabKV@valign{[\@car #1c\@nil]}%
}
```

```
\newenvironment{tabularkv}[1][]{%
  \setkeys{tabKV}{#1}%
  \@nameuse{%
    tabular\tabKV@star@x\expandafter\expandafter\expandafter
  }%
  \expandafter\tabKV@width\tabKV@valign
}{%
  \@nameuse{endtabular\tabKV@star@x}%
}
```

⟨/package⟩

3 Installation

3.1 Download

Package. This package is available on CTAN[1]:

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: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
```

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):

```
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.

[1] CTAN:pkg/tabularkv

3.4 Refresh file name databases

If your TEX distribution (TEX Live, MiKTEX, ...) relies on file name databases, you must refresh these. For example, TEX 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{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 pdfLATEX:

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

4 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.

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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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