

The `ifvtex` package

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Abstract

This package looks for $\text{\texttt{V\TeX}}$, implements and sets the switches `\ifvtex`, `\ifvtex<mode>`, `\ifvtexgex`. It works with plain or $\text{\texttt{L\TeX}}$ formats.

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1 Usage

The package `ifvtex` can be used with both plain- $\text{\texttt{T\TeX}}$ and $\text{\texttt{L\TeX}}$:

plain- $\text{\texttt{T\TeX}}$: `\input ifvtex.sty`

$\text{\texttt{L\TeX}}\ 2_{\epsilon}$: `\usepackage{ifvtex}`

The package implements switches for $\text{\texttt{V\TeX}}$ and its different modes and interprets `\VTeXversion`, `\OpMode`, and `\gexmode`.

<code>\ifvtex</code>

The package provides the switch `\ifvtex`:

```

\ifvtex
... do things, if VTEX is running ...
\else
... other TEX compiler ...
\fi

```

Users of the package `ifthen` can use the switch as boolean:

```
\boolean{ifvtex}
```

<pre> \ifvtexdvi \ifvtexpdf \ifvtexps \ifvtexhtml </pre>
--

VT_EX knows different output modes that can be asked by these switches.

<pre>\ifvtexgex</pre>

This switch shows, whether GeX is available.

2 Implemenation

2.1 Reload check and package identification

```
1 (*package)
```

Reload check, especially if the package is not used with L^AT_EX.

```

2 \begingroup
3   \catcode44 12 % ,
4   \catcode45 12 % -
5   \catcode46 12 % .
6   \catcode58 12 % :
7   \catcode64 11 % @
8   \expandafter\let\expandafter\x\csname ver@ifvtex.sty\endcsname
9   \ifcase 0%
10    \ifx\x\relax % plain
11    \else
12      \ifx\x\empty % LaTeX
13      \else
14        1%
15      \fi
16    \fi
17  \else
18    \expandafter\ifx\csname PackageInfo\endcsname\relax
19      \def\x#1#2{%
20        \immediate\write-1{Package #1 Info: #2.}%
21      }%
22    \else
23      \def\x#1#2{\PackageInfo{#1}{#2, stopped}}%
24    \fi
25    \x@ifvtex{The package is already loaded}%
26  \endgroup
27  \expandafter\endinput
28  \fi
29 \endgroup

```

Package identification:

```

30 \begingroup
31   \catcode40 12 % (
32   \catcode41 12 % )

```

```

33 \catcode44 12 % ,
34 \catcode45 12 % -
35 \catcode46 12 % .
36 \catcode47 12 % /
37 \catcode58 12 % :
38 \catcode64 11 % @
39 \expandafter\ifx\csname ProvidesPackage\endcsname\relax
40 \def\x#1#2#3[#4]{\endgroup
41 \immediate\write-1{Package: #3 #4}%
42 \xdef#1{#4}%
43 }%
44 \else
45 \def\x#1#2[#3]{\endgroup
46 #2[{#3}]%
47 \ifx#1\relax
48 \xdef#1{#3}%
49 \fi
50 }%
51 \fi
52 \expandafter\x\csname ver@ifvtex.sty\endcsname
53 \ProvidesPackage{ifvtex}%
54 [2007/01/10 v1.2 Switches for detecting VTEX and its modes (HO)]

```

2.2 Check for previously defined \ifvtex

```

55 \begingroup
56 \expandafter\ifx\csname ifvtex\endcsname\relax
57 \else
58 \edef\i/{\expandafter\string\csname ifvtex\endcsname}%
59 \expandafter\ifx\csname PackageError\endcsname\relax
60 \def\x#1#2{%
61 \edef\z{#2}%
62 \expandafter\errhelp\expandafter{\z}%
63 \errmessage{Package ifvtex Error: #1}%
64 }%
65 \def\y{^^J}%
66 \newlinechar=10 %
67 \else
68 \def\x#1#2{%
69 \PackageError{ifvtex}{#1}{#2}%
70 }%
71 \def\y{\MessageBreak}%
72 \fi
73 \x{Name clash, \i/ is already defined}{%
74 Incompatible versions of \i/ can cause problems,\y
75 therefore package loading is aborted.%
76 }%
77 \endgroup
78 \expandafter\endinput
79 \fi
80 \endgroup

```

2.3 \ifvtex

`\ifvtex` Create and set the switch. `\newif` initializes the switch with `\iffalse`.

```

81 \newif\ifvtex
82 \begingroup\expandafter\expandafter\expandafter\endgroup
83 \expandafter\ifx\csname VTEXversion\endcsname\relax
84 \else
85 \begingroup\expandafter\expandafter\expandafter\endgroup
86 \expandafter\ifx\csname OpMOde\endcsname\relax
87 \else
88 \vtextrtrue

```

```

89 \fi
90 \fi

```

2.4 Mode and GeX switches

```

91 \newif\ifvtexdvi
92 \newif\ifvtexpdf
93 \newif\ifvtexps
94 \newif\ifvtexhtml
95 \newif\ifvtexgex
96 \ifvtex
97   \ifcase\OpMode\relax
98     \vtexdvitrue
99   \or % 1
100     \vtexpdftrue
101   \or % 2
102     \vtexpstrue
103   \or % 3
104     \vtexpstrue
105   \or\or\or\or\or\or\or % 10
106     \vtexhtmltrue
107   \fi
108   \begingroup\expandafter\expandafter\expandafter\endgroup
109   \expandafter\ifx\csname gexmode\endcsname\relax
110   \else
111     \ifnum\gexmode>0 %
112       \vtexgextrue
113     \fi
114   \fi
115 \fi

```

2.5 Protocol entry

Log comment:

```

116 \begingroup
117   \expandafter\ifx\csname PackageInfo\endcsname\relax
118     \def\x#1#2{%
119       \immediate\write-1{Package #1 Info: #2.}%
120     }%
121   \else
122     \let\x\PackageInfo
123     \expandafter\let\csname on@line\endcsname\empty
124   \fi
125   \x{ifvtex}{%
126     VTeX %
127     \ifvtex
128       in \ifvtexdvi DVI\fi
129       \ifvtexpdf PDF\fi
130       \ifvtexps PS\fi
131       \ifvtexhtml HTML\fi
132       \space mode %
133       with\ifvtexgex\else out\fi\space GeX %
134     \else
135       not %
136     \fi
137     detected%
138   }%
139 \endgroup
140 </package>

```

3 Installation

3.1 Download

Package. This package is available on CTAN¹:

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

[CTAN:macros/latex/contrib/oberdiek/ifvtex.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:macros/latex/contrib/oberdiek/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- \TeX :

```
tex ifvtex.dtx
```

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

```
ifvtex.sty → tex/generic/oberdiek/ifvtex.sty
ifvtex.pdf → doc/latex/oberdiek/ifvtex.pdf
ifvtex.dtx → source/latex/oberdiek/ifvtex.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 \TeX distribution (te \TeX , mi \TeX , ...) relies on file name databases, you must refresh these. For example, te \TeX users run `texhash` or `mktextlsr`.

¹<http://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 ifvtex.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{ifvtex.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 ifvtex.dtx
makeindex -s gind.ist ifvtex.idx
pdflatex ifvtex.dtx
makeindex -s gind.ist ifvtex.idx
pdflatex ifvtex.dtx
```

4 History

[2001/09/26 v1.0]

- First public version.

[2006/02/20 v1.1]

- DTX framework.
- Undefined tests changed.

[2007/01/10 v1.2]

- Fix of the `\ProvidesPackage` description.

5 Index

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