

# 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<sub>E</sub>X 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<sup>A</sup>T<sub>E</sub>X.

```

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

```

Package identification:

```

25 \begingroup
26   \expandafter\ifx\csname ProvidesPackage\endcsname\relax
27     \def\x#1#2#3[#4]{\endgroup
28       \immediate\write-1{Package: #3 #4}%
29       \xdef#1{#4}%
30     }%
31   \else
32     \def\x#1#2[#3]{\endgroup

```

```

33      #2[#{#3}]%
34      \ifx#1\relax
35      \xdef#1{#3}%
36      \fi
37    }%
38  \fi
39 \expandafter\x\csname ver@ifvtex.sty\endcsname
40 \ProvidesPackage{ifvtex}%
41 [2007/01/10 v1.2 Switches for detecting VTEX and its modes (H0)]

```

## 2.2 Check for previously defined \ifvtex

```

42 \begingroup
43 \expandafter\ifx\csname ifvtex\endcsname\relax
44 \else
45 \edef\i/{\expandafter\string\csname ifvtex\endcsname}%
46 \expandafter\ifx\csname PackageError\endcsname\relax
47 \def\x#1#2{%
48 \edef\z{#2}%
49 \expandafter\errhelp\expandafter{\z}%
50 \errmessage{Package ifvtex Error: #1}%
51 }%
52 \def\y{^^J}%
53 \newlinechar=10 %
54 \else
55 \def\x#1#2{%
56 \PackageError{ifvtex}{#1}{#2}%
57 }%
58 \def\y{\MessageBreak}%
59 \fi
60 \x{Name clash, \i/ is already defined}{%
61 Incompatible versions of \i/ can cause problems,\y
62 therefore package loading is aborted.%
63 }%
64 \endgroup
65 \expandafter\endinput
66 \fi
67 \endgroup

```

## 2.3 \ifvtex

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

```

68 \newif\ifvtex
69 \begingroup\expandafter\expandafter\expandafter\endgroup
70 \expandafter\ifx\csname VTEXversion\endcsname\relax
71 \else
72 \begingroup\expandafter\expandafter\expandafter\endgroup
73 \expandafter\ifx\csname OpMode\endcsname\relax
74 \else
75 \vtexttrue
76 \fi
77 \fi

```

## 2.4 Mode and GeX switches

```

78 \newif\ifvtexdvi
79 \newif\ifvtexpdf
80 \newif\ifvtexps
81 \newif\ifvtexhtml
82 \newif\ifvtexgex
83 \ifvtex
84 \ifcase\OpMode\relax
85 \vtextdvitrue

```

```

86 \or % 1
87 \vtexpdftrue
88 \or % 2
89 \vtexpstrue
90 \or % 3
91 \vtexpstrue
92 \or\or\or\or\or\or\or % 10
93 \vtexhtmltrue
94 \fi
95 \begingroup\expandafter\expandafter\expandafter\endgroup
96 \expandafter\ifx\csname gexmode\endcsname\relax
97 \else
98 \ifnum\gexmode>0 %
99 \vtexgextrue
100 \fi
101 \fi
102 \fi

```

## 2.5 Protocol entry

Log comment:

```

103 \begingroup
104 \expandafter\ifx\csname PackageInfo\endcsname\relax
105 \def\x#1#2{%
106 \immediate\write-1{Package #1 Info: #2.}%
107 }%
108 \else
109 \let\x\PackageInfo
110 \expandafter\let\csname on@line\endcsname\empty
111 \fi
112 \x{ifvtex}{%
113 VTeX %
114 \ifvtex
115 in \ifvtexdvi DVI\fi
116 \ifvtexpdf PDF\fi
117 \ifvtexps PS\fi
118 \ifvtexhtml HTML\fi
119 \space mode %
120 with\ifvtexgex\else out\fi\space GeX %
121 \else
122 not %
123 \fi
124 detected%
125 }%
126 \endgroup
127 </package>

```

## 3 Installation

### 3.1 Download

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

[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.

<sup>1</sup><http://ftp.ctan.org/tex-archive/>

## 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- $\text{\TeX}$ :

```
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  $\text{\TeX}$  distribution (`te $\text{\TeX}$` , `mik $\text{\TeX}$` , ...) relies on file name databases, you must refresh these. For example, `te $\text{\TeX}$`  users run `texhash` or `mktextlsr`.

## 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  $\text{\LaTeX}$ .** The `.dtx` chooses its action depending on the format:

**plain- $\text{\TeX}$ :** Run `docstrip` and extract the files.

**$\text{\LaTeX}$ :** Generate the documentation.

If you insist on using  $\text{\LaTeX}$  for `docstrip` (really, `docstrip` does not need  $\text{\LaTeX}$ ), 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<sup>A</sup>T<sub>E</sub>X:

```
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

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

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