

The `ifvtex` package

Heiko Oberdiek
<oberdiek@uni-freiburg.de>

2007/01/10 v1.2

Abstract

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

Contents

1	Usage	1
2	Implementation	2
2.1	Reload check and package identification	2
2.2	Check for previously defined <code>\ifvtex</code>	3
2.3	<code>\ifvtex</code>	3
2.4	Mode and <code>GeX</code> switches	4
2.5	Protocol entry	4
3	Installation	5
3.1	Download	5
3.2	Bundle installation	5
3.3	Package installation	5
3.4	Refresh file name databases	5
3.5	Some details for the interested	5
4	History	6
	[2001/09/26 v1.0]	6
	[2006/02/20 v1.1]	6
	[2007/01/10 v1.2]	6
5	Index	6

1 Usage

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

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

$\text{\texttt{\LaTeX}}$ 2 ϵ : `\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   \catcode44 12 % ,
32   \catcode45 12 % -

```

```

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

```

2.2 Check for previously defined \ifvtex

```

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

```

2.3 \ifvtex

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

```

78 \newif\ifvtex
79 \begingroup\expandafter\expandafter\expandafter\endgroup
80 \expandafter\ifx\csname VTeXversion\endcsname\relax
81 \else
82   \begingroup\expandafter\expandafter\expandafter\endgroup
83   \expandafter\ifx\csname OpMode\endcsname\relax
84   \else
85     \vtexttrue
86   \fi
87 \fi

```

2.4 Mode and GeX switches

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

2.5 Protocol entry

Log comment:

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

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 (TeX, mikTeX, ...) relies on file name databases, you must refresh these. For example, TeX users run texhash or mktexlsr.

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 .
```

¹<http://ftp.ctan.org/tex-archive/>

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

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.

C		\errmessage 60	
\catcode	3, 4, 5, 6, 7, 31, 32, 33, 34, 35		
\csname	8, 18, 36,		
	49, 53, 55, 56, 80, 83, 106, 114, 120		
E		G	
\empty	12, 120	\gexmode	108
\endcsname	8, 18, 36,		
	49, 53, 55, 56, 80, 83, 106, 114, 120		
\endinput	27, 75		
\errhelp	59		
I		I	
\i	55, 70, 71		
\ifcase	9, 94		
\ifnum	108		
\ifvtex	1, <u>78</u> , 93, 124		
\ifvtexdvi	2, 88, 125		

<code>\ifvtexgex</code>	2, 92, 130		S	
<code>\ifvtexhtml</code>	2, 91, 128	<code>\space</code>		129, 130
<code>\ifvtexpdf</code>	2, 89, 126		V	
<code>\ifvtexps</code>	2, 90, 127	<code>\vtexdvitrue</code>		95
<code>\ifx</code>	10, 12,	<code>\vtexgextrue</code>		109
	18, 36, 44, 53, 56, 80, 83, 106, 114	<code>\vtexhtmltrue</code>		103
<code>\immediate</code>	20, 38, 116	<code>\vtexpdfttrue</code>		97
		<code>\vtexpstrue</code>		99, 101
		<code>\vtexttrue</code>		85
			W	
M		<code>\write</code>		20, 38, 116
<code>\MessageBreak</code>	68		X	
		<code>\x</code>		8, 10, 12, 19, 23, 25,
N				37, 42, 49, 57, 65, 70, 115, 119, 122
<code>\newif</code>	78, 88, 89, 90, 91, 92		Y	
<code>\newlinechar</code>	63	<code>\y</code>		62, 68, 71
			Z	
O		<code>\z</code>		58, 59
<code>\OpMode</code>	94			
P				
<code>\PackageError</code>	66			
<code>\PackageInfo</code>	23, 119			
<code>\ProvidesPackage</code>	50			