The ifetex Package

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CTAN: http://www.ctan.org/pkg/ifetex

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Abstract

This small package provides the if-switch `\ifetex` which indicated whether ϵ-TeX is available or not.

Contents

Links

This package is developed using an Mercurial (HG) revision control repository on Bitbucket.org. It is published on the Comprehensive TeX Archive Network (CTAN) and available with the main TeX distributions TeXLive and MikTeX.

Bug reports and feature requests should be submitted using the issue tracker linked below.

The following table lists the location of the package, its downloadable files, both on CTAN and on the package website.

CTAN	https://www.ctan.org/pkg/ifetex
PDF Manual	http://mirrors.ctan.org/macros/latex/contrib/ifetex/ifetex.pdf
TDS ZIP	http://mirrors.ctan.org/install/macros/latex/contrib/ifetex.tds.zip
Website	https://bitbucket.org/martin_scharrer/ifetex/
HG Repository	https://bitbucket.org/martin_scharrer/ifetex/
Issue Tracker	https://bitbucket.org/martin_scharrer/ifetex/issues
Downloads	https://bitbucket.org/martin_scharrer/ifetex/downloads/
PDF Manual	https://bitbucket.org/martin_scharrer/ifetex/downloads/ifetex.pdf
TDS ZIP	https://bitbucket.org/martin_scharrer/ifetex/downloads/ifetex.tds.zip
Source ZIP	https://bitbucket.org/martin_scharrer/ifetex/downloads/ifetex.zip

1 Usage

The package can be loaded as LaTeX package using `\usepackage{ifetex}` or in plainTeX using `\input ifetex`. In both cases it aborts silently if the `\ifetex` macro is already defined.

The package currently test if `\eTeXversion` is defined as a primitive and assumes ϵ-TeX if so.

Note that almost all modern LaTeX distributions use ϵ-TeX. The two major distributions TeX Live and MikTeX support it and use it by default (except for the classic `tex`). The LaTeX which comes with *Scientific Work Place* by MacKichan seems to not support ϵ-TeX yet. Package authors can use this package to test for missing ϵ-TeX and provide fall-back code.

`\ifetex`

Equal to `\iftrue` if ϵ-TeX support is present and `\iffalse` otherwise.

`\NeedsETeX`[⟨*version*⟩]

The LaTeX package provides this macro which can be used in packages or classes to produce an error if ϵ-TeX is not available, similar to `\NeedsTeXFormat`. In addition an optional version number can be given in the format x.y, where x is the main version and y the revision. This number is checked against `\eTeXversion` and `\eTeXrevision` and an appropriate error is raised if the available ϵ-TeX is too old.

2 Implementation

2.1 `ifetex.sty`

```
1  %<!COPYRIGHT>
2  \ProvidesPackage{ifetex}[%
3  %<!DATE>
4  %<!VERSION>
5  %<*DRIVER>
6      2099/01/01 develop
7  %</DRIVER>
8      ifetex]

9  \@@input ifetex
```

\NeedsETeX

#1: optional version number (x.y)

Produces error if e-TeX is not available or if its version is too old.

```
10  \newcommand*\NeedsETeX[1][]{%
11    \ifetex
12      \ifx\@nnil#1\@nnil\else
13      \ifdim\the\eTeXversion\eTeXrevision\p@<#1\p@\
           relax
14        \@latex@error{This file needs e-TeX with ⁄
             version #1%
15        \MessageBreak but only version \the\eTeXversion⁄
             \eTeXrevision is available}{%
16          The current input file will not be processed
17          further,\MessageBreak
18          because it was written for a newer version of⁄
               e-TeX.
19          \MessageBreak\@ehd}%
20        \endinput
21      \fi\fi
22    \else
23      \@latex@error{This file needs e-TeX}{%
24        The current input file will not be processed
25        further,\MessageBreak
26        because it was written for e-TeX which is not ⁄
             available.
27        \MessageBreak\@ehd}%
28      \endinput
29    \fi
30  }
```

2.2 `ifetex.tex`

Abort if `\ifetex` is already defined.

```
32 \expandafter\ifx\csname ifetex\endcsname\relax\else
33     \expandafter\endinput
34 \fi
```

`ifetex`

Checks if `\eTeXversion` is a primitive.

```
35 \begingroup
36 \edef\tempa{\meaning\eTeXversion}%
37 \edef\tempb{\string\eTeXversion}%
38 \ifx\tempa\tempb
39     \endgroup
40     \expandafter\let\csname ifetex\expandafter\/
          endcsname\csname iftrue\endcsname
41 \else
42     \endgroup
43     \expandafter\let\csname ifetex\expandafter\/
          endcsname\csname iffalse\endcsname
44 \fi
```