

# The `etexcmds` package

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## Abstract

New primitive commands are introduced in  $\varepsilon$ -TEX. Sometimes the names collide with existing macros. This package solves this name clashes by adding a prefix to  $\varepsilon$ -TEX's commands. For example,  $\varepsilon$ -TEX's `\unexpanded` is provided as `\etex@unexpanded`.

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## 1 Documentation

New primitive commands are introduced in  $\varepsilon$ -TEX. Unhappily `\unexpanded` collides with a macro in ConTEXt with the same name. This also affects the LATEX world. For example, package m-ch-de loads base/syst-gen.tex that redefines `\unexpanded`. Thus this package defines `\etex@unexpanded` to get rid of the name clash.

## 2 Implementation

<sup>1</sup>  $\langle *package \rangle$

### 2.1 Reload check and package identification

Reload check, especially if the package is not used with LATEX.

```

2 \begingroup
3   \catcode44 12 % ,
4   \catcode45 12 % -
5   \catcode46 12 % .
6   \catcode58 12 % :
7   \catcode64 11 % @
8 \expandafter\let\expandafter\x\csname ver@etexcmds.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\x\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{etexcmds}{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\x\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@etexcmds.sty\endcsname
53 \ProvidesPackage{etexcmds}%
54 [2007/05/06 v1.0 Providing prefix for e-TeX command names (HO)]

```

## 2.2 Catcodes

```

55 \expandafter\edef\csname etexcmds@End\endcsname{%
56   \catcode44 \the\catcode44\relax % ,
57   \catcode45 \the\catcode45\relax % -
58   \catcode46 \the\catcode46\relax % .
59   \catcode61 \the\catcode61\relax % =

```

```

60  \catcode64 \the\catcode64\relax % @
61  \noexpand\endinput
62 }
63 \catcode44 12 % ,
64 \catcode45 12 % -
65 \catcode46 12 % .
66 \catcode61 12 % =
67 \catcode64 11 % @

```

### 2.3 Load package `infwarerr`

```

68 \begingroup\expandafter\expandafter\expandafter\endgroup
69 \expandafter\ifx\csname RequirePackage\endcsname\relax
70   \input infwarerr.sty\relax
71 \else
72   \RequirePackage{infwarerr}%
73 \fi

```

### 2.4 `\unexpanded`

```

\ifetex@unexpanded
74 \newif\ifetex@unexpanded

\etex@unexpanded
75 \begingroup
76 \escapechar=92 % backslash
77 \edef\x{\string\unexpanded}%
78 \edef\y{\meaning\unexpanded}%
79 \ifx\x\y
80   \endgroup
81   \let\etex@unexpanded\unexpanded
82   \etex@unexpandedtrue
83 \else
84   \edef\y{\meaning\normalunexpanded}%
85   \ifx\x\y
86     \endgroup
87     \let\etex@unexpanded\normalunexpanded
88     \etex@unexpandedtrue
89 \else
90   \edef\y{\meaning\@unexpanded}%
91   \ifx\y
92     \endgroup
93     \let\etex@unexpanded\@unexpanded
94     \etex@unexpandedtrue
95 \else
96   \endgroup
97   \PackageInfoNoLine{\etexcmds}{%
98     Could not find \string\unexpanded.\MessageBreak
99     That can mean that you are not using e-TeX or\MessageBreak
100    that some package has redefined \string\unexpanded.\MessageBreak
101    In the latter case, load this package earlier%
102 }%
103 \etex@unexpandedfalse
104 \fi
105 \fi
106 \fi
107 \InfWarErr@End
108 
```

## 3 Test

109 `(*test1)`

```

110 \immediate\write16{etexcmds-test1.tex: test file for plainTeX}
111 \input etexcmds.sty\relax
112 \catcode`\@=11 %
113 \edef\x{\string\unexpanded}
114 \edef\y{\meaning\etex@unexpanded}
115 \ifx\x\y
116 \else
117   \@PackageError{etexcmds-test1}{Test failed}\@ehc
118 \fi
119 \end
120 /test1

121 (*test2)
122 \NeedsTeXFormat{LaTeX2e}
123 \ProvidesFile{etexcmds-test2.tex}[2007/05/06 v1.0 Test file for LaTeX]
124 \RequirePackage{etexcmds}
125 \makeatletter
126 \edef\x{\string\unexpanded}
127 \edef\y{\meaning\etex@unexpanded}
128 \ifx\x\y
129 \else
130   \@PackageError{etexcmds-test2}{Test failed}\@ehc
131 \fi
132 \stop
133 /test2

134 (*test3)
135 \NeedsTeXFormat{LaTeX2e}
136 \ProvidesFile{etexcmds-test3.tex}[2007/05/06 v1.0 Test file for LaTeX]
137 \documentclass{article}
138 \usepackage{m-pictex}
139 \usepackage{m-ch-de}
140 \usepackage{etexcmds}
141 \makeatletter
142 \ifetex@unexpanded
143   \edef\x{\string\unexpanded}%
144   \edef\y{\meaning\etex@unexpanded}%
145   \ifx\x\y
146   \else
147     \@PackageWarningNoLine{etexcmds-test3}{Test failed}%
148   \fi
149 \else
150   \@PackageWarningNoLine{etexcmds-test3}{%
151     Test failed because of ConTeXt%
152   }%
153 \fi
154 \stop
155 /test3
```

## 4 Installation

### 4.1 Download

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

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

[CTAN:macros/latex/contrib/oberdiek/etexcmds.pdf](http://CTAN:macros/latex/contrib/oberdiek/etexcmds.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.

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<sup>1</sup>[ftp://ftp.ctan.org/tex-archive/](http://ftp.ctan.org/tex-archive/)

[CTAN:macros/latex/contrib/oberdiek/oberdiek-tds.zip](#)

**TDS** refers to the standard “A Directory Structure for  $\text{\TeX}$  Files” ([CTAN:tds/tds.pdf](#)). Directories with `texmf` in their name are usually organized this way.

## 4.2 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 `TD\$: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/
```

## 4.3 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 etexcmds.dtx
```

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

<code>etexcmds.sty</code>	→ <code>tex/generic/oberdiek/etexcmds.sty</code>
<code>etexcmds.pdf</code>	→ <code>doc/latex/oberdiek/etexcmds.pdf</code>
<code>etexcmds-test1.tex</code>	→ <code>doc/latex/oberdiek/etexcmds-test1.tex</code>
<code>etexcmds-test2.tex</code>	→ <code>doc/latex/oberdiek/etexcmds-test2.tex</code>
<code>etexcmds-test3.tex</code>	→ <code>doc/latex/oberdiek/etexcmds-test3.tex</code>
<code>etexcmds.dtx</code>	→ <code>source/latex/oberdiek/etexcmds.dtx</code>

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`.

## 4.4 Refresh file name databases

If your  $\text{\TeX}$  distribution (`teTeX`, `mikTeX`, ...) relies on file name databases, you must refresh these. For example, `teTeX` users run `texhash` or `mktexlsr`.

## 4.5 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 etexcmds.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{etexcmds.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 etexcmds.dtx
makeindex -s gind.ist etexcmds.idx
pdflatex etexcmds.dtx
makeindex -s gind.ist etexcmds.idx
pdflatex etexcmds.dtx
```

## 5 History

[2007/04/26 v1.0]

- First version.

## 6 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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