The infwarerr package

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2016/05/16 v1.4

Abstract

This package provides a complete set of macros for informations, warnings and error messages with support for plain T_EX .

Contents

1	Doo	cumentation	2			
2	Implementation					
	2.1	Reload check and package identification	2			
	2.2	Catcodes	3			
	2.3	I₄TEX detection	4			
	2.4	Version for LATEX	4			
	2.5	Version for plain T _E X	5			
3	Test					
	3.1	Catcode checks for loading	8			
	3.2	Macro tests	9			
4	Installation 1					
	4.1	Download	13			
	4.2	Bundle installation	13			
	4.3	Package installation	13			
	4.4	Refresh file name databases	14			
	4.5	Some details for the interested	14			
5	Catalogue 1					
6	History 1					
	[200	7/04/26 v1.0]	15			
		7/06/14 v1.1	15			
		7/09/09 v1.2]	15			
		0/04/08 v1.3]	15			
		6/05/16 v1.4]	15			
7	Ind	ex	15			

 $^{{\}rm ^*Please\ report\ any\ issues\ at\ https://github.com/ho-tex/oberdiek/issues}$

1 Documentation

Package infwarerr defines the following set of commands, given as pseudo regular expression:

```
\@(Package|Class)(Info|InfoNoLine|Warning|WarningNoLine|Error)
```

The first argument is the package or class in question. The second argument contains the message text. \MessageBreak is supported. In case of error messages, the third argument contains the help text. Supported are LaTeX's message texts \Qehc:

```
Try typing <return> to proceed

If that doesn't work, type X <return> to quit.
```

and \@ehd:

```
You're in trouble here. Try typing <return> to proceed If that doesn't work, type X <return> to quit.
```

The package is intended for macro writers that want to write code that works for both LATEX and plain TEX. If LATEX is detected, then the macros of this package will only be wrappers for LATEX's macros. Otherwise LATEX's macros will be mimicked for use with plain TEX.

2 Implementation

```
1 (*package)
```

2.1 Reload check and package identification

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

```
2 \begingroup\catcode61\catcode48\catcode32=10\relax%
   \catcode13=5 % ^^M
4 \endlinechar=13 %
5 \catcode35=6 % #
6 \catcode39=12 % '
7 \catcode44=12 \%,
8 \catcode45=12 % -
9 \catcode46=12 % .
10 \catcode58=12 %:
   \catcode64=11 % @
11
   \catcode123=1 % {
12
   \catcode125=2 % }
13
14
   \expandafter\let\expandafter\x\csname ver@infwarerr.sty\endcsname
15
   \ifx\x\relax % plain-TeX, first loading
16
17
     \left\langle \right\rangle \
18
     \ifx\x\empty % LaTeX, first loading,
19
      % variable is initialized, but \ProvidesPackage not yet seen
20
      \expandafter\ifx\csname PackageInfo\endcsname\relax
21
        \def\x#1#2{\%}
22
23
         \immediate\write-1{Package #1 Info: #2.}%
24
        7%
25
      \else
26
        \def\x#1#2{\PackageInfo{#1}{#2, stopped}}%
27
28
      \x{infwarerr}{The package is already loaded}%
29
      \aftergroup\endinput
30
     \fi
   \fi
31
32 \endgroup%
```

Package identification:

```
33 \begingroup\catcode61\catcode48\catcode32=10\relax%
   \color=5 \% ^M
34
35 \endlinechar=13 %
36 \catcode35=6 % #
37 \catcode39=12 % '
38 \catcode40=12 % (
39 \catcode41=12 % )
40 \catcode44=12 %,
41 \catcode45=12 % -
42 \catcode46=12 %.
   \catcode47=12 % /
43
   \catcode58=12 %:
44
45
   \catcode64=11 % @
46
   \catcode91=12 % [
47
   \catcode93=12 % ]
48
   \catcode123=1 % {
   \catcode125=2 % }
49
   \expandafter\ifx\csname ProvidesPackage\endcsname\relax
50
     51
      \immediate\write-1{Package: #3 #4}%
52
      \xdef#1{#4}%
53
    }%
54
   \else
55
     \def \ \#1\#2[\#3]{\endgroup}
56
      #2[{#3}]%
57
58
      \inf #1\ undefined
59
       \xdef#1{#3}%
60
      \fi
61
      \inf #1 \operatorname{lax}
       \xdef#1{#3}%
62
      ١fi
63
    }%
64
65 \fi
66 \expandafter\x\csname ver@infwarerr.sty\endcsname
67 \ProvidesPackage{infwarerr}%
68 [2016/05/16 v1.4 Providing info/warning/error messages (HO)]%
```

2.2 Catcodes

```
69 \begingroup\catcode61\catcode48\catcode32=10\relax%
70 \catcode13=5 % ^^M
71
                                               \endlinechar=13 %
                                               \catcode123=1 % {
72
                                             \catcode125=2 % }
73
                                               \catcode64=11 % @
74
                                                 \def\x{\endgroup
75
                                                                 \expandafter\edef\csname InfWarErr@AtEnd\endcsname{%
76
77
                                                                                        \endlinechar=\the\endlinechar\relax
                                                                                        \catcode13=\the\catcode13\relax
78
                                                                                        \color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\t
79
                                                                                        \color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=
80
81
                                                                                        \colored{catcode61=\label{catcode61}relax}
82
                                                                                        \colored{catcode64} \to \colored{catcode64}
83
                                                                                        \color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=\color=
                                                                                     \color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\the\color=\t
84
                                                                 }%
85
86 }%
87 \x\catcode61\catcode48\catcode32=10\relax%
88 \catcode13=5 % ^^M
89 \endlinechar=13 %
90 \catcode35=6 % #
```

```
91 \catcode64=11 % @
                    92 \catcode123=1 % {
                    93 \catcode125=2 % }
                    94 \def\TMP@EnsureCode#1#2{%
                        \edef\InfWarErr@AtEnd{%
                    96
                         \InfWarErr@AtEnd
                    97
                         \catcode#1=\the\catcode#1\relax
                    98
                       ጉ%
                       \color= 42\relax
                    99
                   100 }
                   101 \TMP@EnsureCode{10}{12}% ^^J
                   102 \TMP@EnsureCode{39}{12}%
                   103 \TMP@EnsureCode{40}{12}% (
                   104 \TMP@EnsureCode{41}{12}%)
                   105 \TMP@EnsureCode{44}{12}%,
                   106 \TMP@EnsureCode{45}{12}% -
                   107 \TMP@EnsureCode{46}{12}\%.
                   108 \TMP@EnsureCode{58}{12}%:
                   109 \TMP@EnsureCode\{60\}\{12\}\% <
                   110 \TMP@EnsureCode{62}{12}% >
                   111 \TMP@EnsureCode{94}{7}% ^
                   112 \edf\InfWarErr@AtEnd\InfWarErr@AtEnd\noexpand\endinput\}
                        LATEX detection
                   2.3
                   113 \begingroup
                   114 \let\x=Y%
                   115
                       \def\check#1\%
                   116
                         \c \@check{Package}{#1}%
                   117
                         118
                   119
                        \def\@check#1#2{\%}
                   120
                         \expandafter\ifx\csname #1#2\endcsname\relax
                   121
                   122
                          \left| x=N\% \right|
                         \fi
                   123
                   124
                       }%
                   125
                        \check{Info}%
                   126
                       \check{Warning}%
                       \check{Error}%
                   127
                       \@check{Package}{WarningNoLine}%
                   128
                       \@check{Class}{WarningNoLine}%
                   129
                   130 \@check{}{@ehc}%
                   131 \@check{}{@ehd}%
                   132 \expandafter\endgroup
                   133 \ifx\x Y%
                         Version for LATEX
     \@PackageInfo
                        \let\@PackageInfo\PackageInfo
\@PackageInfoNoLine
                   135
                        136
                         \PackageInfo{#1}{#2}@gobble}%
                   137
        \@ClassInfo
                   138
                        \let\@ClassInfo\ClassInfo
  \@ClassInfoNoLine
                        \def\@ClassInfoNoLine#1#2{%
                   139
                         \ClassInfo{#1}{#2}@gobble}%
                   140
                       }%
                   141
```

```
\@PackageWarning
                          142 \let\@PackageWarning\PackageWarning
\@PackageWarningNoLine
                          143 \let\@PackageWarningNoLine\PackageWarningNoLine
         \@ClassWarning
                              \let\@ClassWarning\ClassWarning
  \@ClassWarningNoLine
                              \let\@ClassWarningNoLine\ClassWarningNoLine
                          145
         \@PackageError
                              \let\@PackageError\PackageError
            \@ClassError
                              \let\@ClassError\ClassError
                          147
                          148
                              \expandafter\InfWarErr@AtEnd
                          149 \fi%
                          2.5
                               Version for plain T<sub>E</sub>X
      \InfWarErr@online
                          150 \begingroup\expandafter\endgroup
                          151 \ifcase\expandafter\ifx\csname inputlineno\endcsname\relax
                                   0 %
                          152
                                  \else
                          153
                                    \ifnum\inputlineno<0 %
                          154
                                     0 %
                          155
                                   \else
                          156
                                     1 %
                          157
                                    \fi
                          158
                                  \fi
                          159
                          160 \def\InfWarErr@online{}%
                              \def\InfWarErr@online{ on input line \the\inputlineno}%
                          163 \fi
   \InfWarErr@protected
                          164 \begingroup\expandafter\expandafter\expandafter\endgroup
                          165 \expandafter\ifx\csname protected\endcsname\relax
                          166 \def\InfWarErr@protected{}%
                          167 \else
                          168 \left| \text{let}\right| 
                          169 \fi
      \InfWarErr@unused
                          170 \chardef\InfWarErr@unused=16 %
         \InfWarErr@ehc
                          171 \def\InfWarErr@ehc{\%
                          172 Try typing \space <return> \space to proceed.\MessageBreak
                          173 If that doesn't work, type \space X <return> \space to quit.%
                          174 }
         \InfWarErr@ehd
                          175 \def\InfWarErr@ehd{%
                          176 You're in trouble here. \space\@ehc
                          177 }
```

```
\InfWarErr@GenericInfo
                                                                179
                                                                          \begingroup
                                                                180
                                                                             \verb|\label{lem:local_state}| \label{local_state} $$ \left( \operatorname{InfWarErr@online} \right) $$
                                                                181
                                                                              \label{longdef} $$ \odd{$\mathbb{4}$} \
                                                                182
                                                                             \def\space{}%
                                                                              \def\@spaces{\space\space\space\space}%
                                                                183
                                                                              184
                                                                             \newlinechar=10 %
                                                                185
                                                                             \escapechar=92 %
                                                                186
                                                                              \label{limited} $$ \operatorname{\write-1{\#2\oon@line.}\%} $$
                                                                187
                                                                188
                                                                          \endgroup
                                                                189 }
\InfWarErr@GenericWarning
                                                                190 \InfWarErr@protected\def\InfWarErr@GenericWarning#1#2{%
                                                                          \begingroup
                                                                192
                                                                              \ \left( \frac{4}{2} \right) = 12
                                                                193
                                                                              \def\space{}%
                                                                194
                                                                              \def\@spaces{\space\space\space\space}%
                                                                195
                                                                              196
                                                                             \newlinechar=10 %
                                                                197
                                                                             \escapechar=92 %
                                                                198
                                                                             \label{limited} $$ \operatorname{InfWarErr@unused}^{-^J\#2\on@line.^-J}\% $$
                                                                199
                                                                200
                                                                          \endgroup
                                                                201 }
      \InfWarErr@GenericError Old TFX versions below 3.141 where ^J is not working as newline in error message
                                                                and help texts are not supported.
                                                                202 \InfWarErr@protected\def\InfWarErr@GenericError#1#2#3#4{%
                                                                203
                                                                          \begingroup
                                                                              \immediate\write\InfWarErr@unused{}%
                                                                204
                                                                              \def\space{}%
                                                                205
                                                                              \def\@spaces{\space\space\space\space}%
                                                                206
                                                                207
                                                                              \let\@ehc\InfWarErr@ehc
                                                                208
                                                                              \let\@ehd\InfWarErr@ehd
                                                                209
                                                                              \let\on@line\InfWarErr@online
                                                                              210
                                                                              \newlinechar=10 %
                                                                211
                                                                212
                                                                              \escapechar=92 %
                                                                213
                                                                              \ensuremath{\mbox{ }}\ensuremath{\mbox{ }}\ensure
                                                                214
                                                                              \InfWarErr@help
                                                                              \def\MessageBreak{^^J#1}%
                                                                215
                                                                216
                                                                              \errmessage{%
                                                                                 #2.^^J^^J%
                                                                217
                                                                                 #3^^J%
                                                                218
                                                                                 Type \space H <return> \space for immediate help.^^J ...^^J%
                                                                219
                                                                             }%
                                                                220
                                                                221
                                                                          \endgroup
                                                                222 }
                             \@PackageInfo
                                                                223 \def\@PackageInfo#1#2{%
                                                               224 \InfWarErr@GenericInfo{%
                                                                225
                                                                             (#1) \@spaces\@spaces
```

\@PackageInfoNoLine

226 }{%

227 P 228 }% 229 }

Package #1 Info: #2%

```
230 \def\@PackageInfoNoLine#1#2{%
                                                                                                                     231 \ensuremath{\mbox{\sc QPackageInfo}{\#1}{\#2\ensuremath{\mbox{\sc Qobble}}\%}}
                                                                                                                     232 }
                                                            \@ClassInfo
                                                                                                                     233 \def\@ClassInfo#1#2{%
                                                                                                                     234 \InfWarErr@GenericInfo{%
                                                                                                                                              (#1) \space\spaces\@spaces
                                                                                                                     236 }{%
                                                                                                                     237
                                                                                                                                               Class #1 Info: #2%
                                                                                                                     238 }%
                                                                                                                     239 }
                              \@ClassInfoNoLine
                                                                                                                     240 \def\@ClassInfoNoLine#1#2{%
                                                                                                                     ^{241} \ensuremath{\mbox{\mbox{\tt QClassInfo}$\{\#1\}{\mbox{\tt 42}\mbox{\tt Qgobble}}}\%
                                                                                                                     242 }
                             \@PackageWarning
                                                                                                                     243 \def\@PackageWarning#1#2{%
                                                                                                                     244 \InfWarErr@GenericWarning{%
                                                                                                                     245
                                                                                                                                              (#1)\@spaces\@spaces\@spaces
                                                                                                                     246 }{%
                                                                                                                                            Package #1 Warning: #2%
                                                                                                                     247
                                                                                                                     248 }%
                                                                                                                     249 }
\verb|\QPackageWarningNoLine| \\
                                                                                                                     250 \ensuremath{ \mbox{\tt def}\mbox{\tt @PackageWarningNoLine\#1\#2}\{\% \ensuremath{\mbox{\tt max}}\mbox{\tt warningNoLine\#1\#2}\} \label{eq:lemmass}
                                                                                                                     251 \ensuremath{\mbox{\mbox{$\sim$}}} \ensuremath{\mbox{\mbox{$
                                                                                                                     252 }
                                         \@ClassWarning
                                                                                                                     253 \def\@ClassWarning#1#2{\%
                                                                                                                     254 \InfWarErr@GenericWarning{%
                                                                                                                                               (#1) \space\@spaces\@spaces
                                                                                                                     255
                                                                                                                     256 }{%
                                                                                                                                               Class #1 Warning: #2%
                                                                                                                     257
                                                                                                                     258 }%
                                                                                                                     259 }
           \@ClassWarningNoLine
                                                                                                                     260 \def\@ClassWarningNoLine#1#2{%
                                                                                                                                        \@ClassWarning{#1}{#2\@gobble}%
                                                                                                                     262 }
                                          \@PackageError
                                                                                                                     263 \ensuremath{ \mbox{def}\ensuremath{ \mbox{\mbox{\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{}\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbo
                                                                                                                     264 \InfWarErr@GenericError{%
                                                                                                                                               (#1)\@spaces\@spaces\@spaces
                                                                                                                     266 }{%
                                                                                                                     267
                                                                                                                                            Package #1 Error: #2%
                                                                                                                     268 }{%
                                                                                                                     269
                                                                                                                                           See the #1 package documentation for explanation.%
                                                                                                                     270 }{#3}%
                                                                                                                     271 }
                                                     \@ClassError
                                                                                                                     272 \def\@ClassError#1#2#3{\%
                                                                                                                    273 \InfWarErr@GenericError{%
                                                                                                                                              (#1) \space\@spaces\@spaces
                                                                                                                    274
                                                                                                                     275 }{%
```

```
276 Class #1 Error: #2%
277 }{%
278 See the #1 class documentation for explanation.%
279 }{#3}%
280 }
281 \InfWarErr@AtEnd%
282 \/package\
```

3 Test

3.1 Catcode checks for loading

```
283 (*test1)
284 \catcode`\{=1 %
285 \catcode`\}=2 %
286 \catcode`\#=6 \%
287 \catcode`\@=11 %
288 \expandafter\ifx\csname count@\endcsname\relax
289 \countdef\count@=255 \%
290 \fi
291 \expandafter\ifx\csname @gobble\endcsname\relax
292 \long\def\@gobble#1{}\%
294 \expandafter\ifx\csname \ensuremath{\texttt{Qfirstofone}}\endcsname\relax
295 \long\def\@firstofone#1{#1}%
296 \fi
297 \expandafter\ifx\csname loop\endcsname\relax
298 \expandafter\@firstofone
299 \else
300 \expandafter\@gobble
301 \fi
302 {%
     \def\loop#1\repeat{%
303
304
      \def\body{#1}\%
305
      \iterate
306 }%
307
    \def\iterate{%
308
      \body
       \let\next\iterate
309
      \else
310
        \let\next\relax
311
312
      \fi
313
      \next
314 }%
     \let\repeat=\fi
316 }%
317 \def\RestoreCatcodes{}
318 \count@=0 %
319 \loop
     \edef\RestoreCatcodes{%
320
321
      \RestoreCatcodes
      \catcode\the\count@=\the\catcode\count@\relax
322
323 }%
324 \ifnum\count@<255 \%
325 \advance\count@ 1 %
326 \text{ } \text{repeat}
327
328 \ensuremath{\mbox{\sc NangeCatcodeInvalid}\#1\#2} \{\%
329 \count@=#1\relax
     \loop
330
      \catcode\count@=15 %
331
```

```
\ifnum\count@<#2\relax
332
333
      \advance\count@ 1 %
334
    \repeat
335 }
336 \def\RangeCatcodeCheck#1#2#3{%
337
    \count@=#1\relax
338
    \loop
339
      \ifnum#3=\catcode\count@
340
      \else
       \errmessage{%
341
         Character \the\count@\space
342
         with wrong catcode \the\catcode\count@\space
343
        instead of \number#3%
344
       }%
345
346
    \index(0) = \frac{2\pi}{2}
347
348
      \advance\count@ 1 %
349
    \repeat
350 }
351 \def\space{ }
352 \expandafter\ifx\csname LoadCommand\endcsname\relax
    \def\LoadCommand{\input infwarerr.sty\relax}%
353
354 \fi
355 \def\Test{%
    \RangeCatcodeInvalid{0}{47}%
356
    \RangeCatcodeInvalid{58}{64}%
358
    \RangeCatcodeInvalid{91}{96}%
359
    \RangeCatcodeInvalid{123}{255}%
360
    \catcode`\@=12 %
    \color=0 \%
361
    \catcode`\%=14 %
362
    \LoadCommand
363
364
    \RangeCatcodeCheck{0}{36}{15}%
365
    \RangeCatcodeCheck{37}{37}{14}%
    \RangeCatcodeCheck{38}{47}{15}%
366
    \RangeCatcodeCheck{48}{57}{12}%
    \RangeCatcodeCheck{58}{63}{15}%
369
    \RangeCatcodeCheck{64}{64}{12}%
370
    \RangeCatcodeCheck{65}{90}{11}%
371
    \RangeCatcodeCheck{91}{91}{15}%
    \RangeCatcodeCheck{92}{92}{0}\%
372
    \verb|\RangeCatcodeCheck{93}{96}{15}|%
373
    \RangeCatcodeCheck{97}{122}{11}%
374
375
    \RangeCatcodeCheck{123}{255}{15}%
376
    \RestoreCatcodes
377 }
378 \Test
379 \csname @@end\endcsname
380 \setminus end
381 (/test1)
3.2
     Macro tests
382 \langle *test2 \rangle
383 \let\PackageInfo\relax
384 \input infwarerr.sty\relax
385 \let\OrgWrite\write
386 \chardef\WriteUnused=16 %
387 \def\msg#{\immediate\OrgWrite\WriteUnused}
388 \msg{File: infwarerr-test2.tex 2016/05/16 v1.4 Test file for plain-TeX}
389 \catcode64=11 %
390 (/test2)
391 (*test3)
```

```
392 \NeedsTeXFormat{LaTeX2e}
393 \ProvidesFile{infwarerr-test3.tex}[2016/05/16 v1.4 Test file for LaTeX]
394 \RequirePackage{infwarerr}[2016/05/16]
395 \makeatletter
396 \let\OrgWrite\write
397 \chardef\WriteUnused=\@unused
398 \def\msg#{\immediate\OrgWrite\WriteUnused}
399 (/test3)
400 (*test2 i test3)
401 \def\pkgname{PACKAGE}
402 \def\clsname{CLASS}
403 \def\msgtext{MESSAGE\MessageBreak SECOND LINE}
404 \def\hlptext{HELP\MessageBreak SECOND LINE}
406 \let\OrgWrite\write
407 \let\OrgErrMessage\errmessage
408
409 \def\write#1#{%
410 \@write{#1}%
411 }
412 \def\@write#1#2{%
413 \OrgWrite#1{#2}%
414 \xdef\WriteNum{\number#1}%
415 \xdef\WriteText{#2}%
416 }
417 \def\TestFailed#1#2{%
418 \OrgErrMessage{Test (\string#1) failed: #2}%
419 }
420 \def\TestWrite#1#2#3{%
421 \ifnum\WriteNum=#2\relax
422 \else
     \TestFailed#1{write stream number: \WriteNum <> #2}%
424 \fi
425 \begingroup
426
     \let~\space
427
     \edef\TestString{#3}%
428
     \ifx\WriteText\TestString
429
     \else
       \msg{}\%
430
       \msg{[\WriteText]}%
431
       \msg{<>}\%
432
       \mbox{msg}{[\#3]}\% hash-ok
433
       \TestFailed#1{write text}%
434
435
436 \endgroup
437 }
438 \newtoks\ErrHelpToks
439 \def\errmessage#1{%
440 \global\ErrHelpToks=\expandafter{\the\errhelp}\%
441 \msg{*********** error message *************}%
442 \msg{! #1}%
443 \msg{********** help message ***********}%
444 \msg{\the\errhelp}%
446 \xdef\ErrMessage{! #1}%
447 }
448 \def\TestInfo{%
449 \@PackageInfo\pkgname\msgtext
450 \quad \texttt{\TestWrite} \ \texttt{\QPackageInfo} \{-1\} \{\%
    Package PACKAGE Info: MESSAGE^^J%
451
452
    (PACKAGE)~~~~~SECOND LINE on input line \the\inputlineno.%
453 }%
```

```
\@PackageInfoNoLine\pkgname\msgtext
454
         \TestWrite\@PackageInfoNoLine{-1}{%
455
           Package PACKAGE Info: MESSAGE^^J%
456
           (PACKAGE)~~~~~SECOND LINE.%
457
458 }%
459
         \@ClassInfo\clsname\msgtext
460
         \TestWrite\@ClassInfo{-1}{%
           Class CLASS Info: MESSAGE^^J%
461
           (CLASS)----SECOND LINE on input line \theta
462
463 }%
         \@ClassInfoNoLine\clsname\msgtext
464
         \TestWrite\@ClassInfoNoLine{-1}{%
465
           Class CLASS Info: MESSAGE^^J%
466
            (CLASS)~~~~SECOND LINE.%
468 }%
469 }
470 \def\TestWarning{%
         \@PackageWarning\pkgname\msgtext
471
         \TestWrite\@PackageWarning\WriteUnused{%
472
473
           Package PACKAGE Warning: MESSAGE^^J%
474
           (PACKAGE)~~~~~SECOND LINE on input line \the\inputlineno.%
475
476
         }%
477
         \@PackageWarningNoLine\pkgname\msgtext
478
479
         \TestWrite\@PackageWarningNoLine\WriteUnused{%
480
           Package PACKAGE Warning: MESSAGE^^J%
481
            (PACKAGE)~~~~~SECOND LINE.%
482
            ^^J%
483
        }%
484
         \@ClassWarning\clsname\msgtext
485
         \TestWrite\@ClassWarning\WriteUnused{%
486
487
           Class CLASS Warning: MESSAGE^^J%
488
           (CLASS)~~~~SECOND LINE on input line \theta.
489
490
491 }%
492
         \@ClassWarningNoLine\clsname\msgtext
         \verb|\TestWrite|@ClassWarningNoLine|WriteUnused{||}|
493
494
           Class CLASS Warning: MESSAGE^^J%
495
           (CLASS)~~~~SECOND LINE.%
496
497
498 }%
499 }
500 \def\TestError{%
501 (test3) \let\write\OrgWrite
502 (test3) \def\plaindots{}
503 \langle test2 \rangle \ \def \rangle \ \def \ \de
\verb| OPackageError\pkgname\msgtext\hlptext| \\
         \@TestError\@PackageError{%
505
           ! Package PACKAGE Error: MESSAGE^^J%
506
           (PACKAGE)~~~~SECOND LINE.^^J%
507
508
509
           See the PACKAGE package documentation for explanation.^^J%
           Type~~H <return>~~for immediate help\plaindots
511 }{%
          HELP^^J%
512
           SECOND LINE%
513
514 }%
\tt 515 \quad \verb|\@ClassError\clsname\msgtext\hlptext|
```

```
\@TestError\@ClassError{%
516
      ! Class CLASS Error: MESSAGE^^J%
517
      (CLASS)~~~~SECOND LINE.^^J%
518
520
      See the CLASS class documentation for explanation.^^J%
521
      Type~~H <return>~~for immediate help\plaindots
522
    }{%
     HELP^^J%
523
      SECOND LINE%
524
    ጉ%
525
    \@PackageError\pkgname\msgtext\@ehc
526
    \@TestError\@PackageError{%
527
      ! Package PACKAGE Error: MESSAGE^^J%
528
      (PACKAGE)~~~~SECOND LINE.^^J%
529
530
531
      See the PACKAGE package documentation for explanation.^^J%
      Type~~H <return>~~for immediate help\plaindots
532
    }{%
533
      Try typing~~<return>~~to proceed.^^J%
534
      If that doesn't work, type~~X <return>~~to quit.%
535
536
    \@PackageError\pkgname\msgtext\@ehd
537
     \@TestError\@PackageError{%
538
      ! Package PACKAGE Error: MESSAGE^^J%
539
      (PACKAGE)~~~~~SECOND LINE.^^J%
540
541
      See the PACKAGE package documentation for explanation. ^ J\%
542
      Type~~H <return>~~for immediate help\plaindots
543
544
      You're in trouble here.~~Try typing~~<return>~~to proceed.^^J%
545
      If that doesn't work, type~~X <return>~~to quit.%
546
547 }%
548 }
549 \def\@TestError#1#2#3{%
    \begingroup
551
      \let~\space
      \left( \frac{\#2}{\%} \right)
553 \langle \text{test3} \rangle \setminus @onelevel@sanitize \setminus x
554 (test3) \@onelevel@sanitize\ErrMessage
      \ifx\x\ErrMessage
555
556
      \else
       \msg{}\%
557
       \msg{[\ErrMessage]}%
558
559
       \msg{<>}\%
560
       \msg{[\x]}%
561
       \TestFailed#1{errmessage text}%
562
563
      \edef\x{\the\ErrHelpToks}%
564
      \left( \frac{\#3}{\%} \right)
565
      ifx\x\y
      \else
566
       \msg{}\%
567
       \mbox{msg{[\the\ErrHelpToks]}}\%
568
569
       \msg{<>}\%
570
       \msg{[\y]}\%
571
       \TestFailed#1{errhelp text}%
572
573
    \endgroup
574 }
575 \TestInfo
576 \TestWarning
577 \TestError
```

```
578 \langle \text{/test2 j test3} \rangle

579 \langle \text{test2} \rangle \text{ end}

580 \langle \text{test3} \rangle \rangle \otimes \text{end}
```

4 Installation

4.1 Download

Package. This package is available on CTAN¹:

CTAN:macros/latex/contrib/oberdiek/infwarerr.dtx The source file.

CTAN:macros/latex/contrib/oberdiek/infwarerr.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:install/macros/latex/contrib/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.

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 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/
```

4.3 Package installation

Unpacking. The .dtx file is a self-extracting docstrip archive. The files are extracted by running the .dtx through plain TFX:

```
tex infwarerr.dtx
```

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

```
\label{eq:control_control} infwarerr.sty & \rightarrow \text{tex/generic/oberdiek/infwarerr.sty} \\ infwarerr.pdf & \rightarrow \text{doc/latex/oberdiek/infwarerr.pdf} \\ \text{test/infwarerr-test1.tex} & \rightarrow \text{doc/latex/oberdiek/test/infwarerr-test1.tex} \\ \text{test/infwarerr-test2.tex} & \rightarrow \text{doc/latex/oberdiek/test/infwarerr-test2.tex} \\ \text{test/infwarerr-test3.tex} & \rightarrow \text{doc/latex/oberdiek/test/infwarerr-test3.tex} \\ \text{infwarerr.dtx} & \rightarrow \text{source/latex/oberdiek/infwarerr.dtx} \\ \end{aligned}
```

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.

¹http://ctan.org/pkg/infwarerr

4.4 Refresh file name databases

If your T_EX distribution (teT_EX, mikT_EX, ...) relies on file name databases, you must refresh these. For example, teT_EX users run texhash or mktexlsr.

4.5 Some details for the interested

Unpacking with LATEX. The .dtx chooses its action depending on the format:

plain T_EX: Run docstrip and extract the files.

LATEX: Generate the documentation.

If you insist on using LATEX for docstrip (really, docstrip does not need LATEX), then inform the autodetect routine about your intention:

```
latex \let\install=y\input{infwarerr.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 pdfIATEX:

```
pdflatex infwarerr.dtx
makeindex -s gind.ist infwarerr.idx
pdflatex infwarerr.dtx
makeindex -s gind.ist infwarerr.idx
pdflatex infwarerr.dtx
```

5 Catalogue

The following XML file can be used as source for the TEX Catalogue. The elements caption and description are imported from the original XML file from the Catalogue. The name of the XML file in the Catalogue is infwarerr.xml.

```
581 (*catalogue)
582 <?xml version='1.0' encoding='us-ascii'?>
583 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
584 <entry datestamp='$Date$' modifier='$Author$' id='infwarerr'>
585 <name>infwarerr</name>
586 <caption>Complete set of information/warning/error messages.</caption>
   <authorref id='auth:oberdiek'/>
587
    <copyright owner='Heiko Oberdiek' year='2007,2010'/>
588
    clicense type='lppl1.3'/>
589
590
    <version number='1.4'/>
591
    <description>
      This package provides a complete set of macros for information,
592
      warning and error messages. Under LaTeX, the commands are
593
594
      wrappers for the corresponding LaTeX commands; under Plain TeX
595
      they are also available as complete implementations.
      <\a>>
596
      The package is part of the <xref refid='oberdiek'>oberdiek</xref>
597
      bundle.
598
599 </description>
    <documentation details='Package documentation'</pre>
600
       href='ctan:/macros/latex/contrib/oberdiek/infwarerr.pdf'/>
602 <ctan file='true' path='/macros/latex/contrib/oberdiek/infwarerr.dtx'/>
```

```
603 <miktex location='oberdiek'/>
604 <texlive location='oberdiek'/>
605 <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'/>
606 </entry>
607 ⟨/catalogue⟩
```

6 History

[2007/04/26 v1.0]

• First version.

[2007/06/14 v1.1]

• Small fixes.

[2007/09/09 v1.2]

• Catcode section extended.

[2010/04/08 v1.3]

• Ensure \escapechar=92 (backslash) for infos/warnings/errors.

[2016/05/16 v1.4]

• Documentation updates.

7 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; plain numbers refer to the code lines where the entry is used.

Symbols	\@onelevel@sanitize 553, 554
\# 286	\@spaces 183, 195,
\% 362	206, 225, 235, 245, 255, 265, 274
\@ 287, 360	\@undefined 58
\@@end 580	\@unused 397
\@ClassError <u>147</u> , <u>272</u> , 515, 516	\@write 410, 412
\@ClassInfo <u>138</u> , <u>233</u> , 241, 459, 460	\\ 361
\ClassInfoNoLine . $\underline{139}$, $\underline{240}$, 464 , 465	\{
\@ClassWarning <u>144</u> , <u>253</u> , 261, 485, 486	\} 285
$\ClassWarningNoLine 145, 260, 492, 493$	Α
$\ensuremath{\texttt{QPackageError}}$	
<u>263</u> , 504, 505, 526, 527, 537, 538	\advance
$\ensuremath{\texttt{QPackageInfo}}\ \dots\ \underline{134},\ \underline{223},\ 231,\ 449,\ 450$	\aitergroup29
$\ensuremath{\texttt{QPackageInfoNoLine}}$ 135, 230, 454, 455	В
$\ensuremath{\texttt{QPackageWarning}}\ \underline{142}, \underline{243}, \underline{251}, \underline{471}, \underline{472}$	\body
\@PackageWarningNoLine	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
143, 250, 478, 479	\mathbf{C}
\@TestError 505, 516, 527, 538, 549	\catcode 2, 3, 5, 6, 7, 8, 9, 10, 11,
\@check 116,	12, 13, 33, 34, 36, 37, 38, 39, 40,
117, 118, 120, 128, 129, 130, 131	41, 42, 43, 44, 45, 46, 47, 48, 49,
\@ehc 176, 207, 526	69, 70, 72, 73, 74, 78, 79, 80, 81,
\@ehd 208, 537	82, 83, 84, 87, 88, 90, 91, 92, 93,
\@firstofone	97, 99, 284, 285, 286, 287, 322,
\@gobble 136, 140, 181,	331, 339, 343, 360, 361, 362, 389
193, 231, 241, 251, 261, 292, 300	\chardef 170, 386, 397

\check	\msgtext 403, 449, 454, 459, 464, 471, 478, 485, 492, 504, 515, 526, 537 N \NeedsTeXFormat
\countdef	O \on@line 180, 187, 192, 199, 209
T.	\OrgErrMessage 407, 418
E \empty	\OrgWrite
\endcsname	P
14, 21, 50, 66, 76, 121, 151, 165, 288, 291, 294, 297, 352, 379 \endinput	\PackageError
\endlinechar 4, 35, 71, 77, 89	\PackageWarningNoLine 143
\errhelp 213, 440, 444	\pkgname 401,
\ErrHelpToks 438, 440, 563, 568 \ErrMessage 446, 554, 555, 558	449, 454, 471, 478, 504, 526, 537 \plaindots . 502, 503, 510, 521, 532, 543
\errmessage 216, 341, 407, 439	\protected 168
\escapechar 186, 198, 212	\ProvidesFile 393
н	\ProvidesPackage
\hlptext 404, 504, 515	${f R}$
-	\RangeCatcodeCheck
I \ifcase 151	. 336, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375
\ifnum 154, 324, 332, 339, 347, 421	\RangeCatcodeInvalid
\ifx 15, 18, 21, 50,	
58, 61, 121, 133, 151, 165, 288,	\repeat 303, 315, 326, 334, 349
291, 294, 297, 352, 428, 555, 565 \immediate 23, 52, 187, 199, 204, 387, 398	\RequirePackage
\InfWarErr@AtEnd 95, 96, 112, 148, 281	(23323232323232)
\InfWarErr@ehc $\underline{171}$, $\underline{207}$	\mathbf{S}
\InfWarErr@Con ani aFrance 202 264 273	\space 172, 173, 176, 182, 183,
\InfWarErr@GenericError 202, 264, 273 \InfWarErr@GenericInfo . 178, 224, 234	194, 195, 205, 206, 219, 235, 255, 274, 342, 343, 351, 426, 551
\InfWarErr@GenericWarning	
	T
\InfWarErr@help 213, 214 \InfWarErr@online <u>150</u> , 180, 192, 209	\Test
\InfWarErr@protected \(\frac{150}{164}, 178, 190, 202 \)	\TestFailed 417, 423, 434, 561, 571
\InfWarErr@unused <u>170</u> , 199, 204	\TestInfo 448, 575
\input	\TestString
\inputlineno 154, 162, 452, 462, 475, 489 \iterate	\TestWarning
(Iterate 505, 507, 509	455, 460, 465, 472, 479, 486, 493
${f L}$	\the $77, 78, 79, 80, 81, 82, 83,$
\LoadCommand	84, 97, 162, 322, 342, 343, 440, 444, 452, 462, 475, 489, 563, 568
\loop 303, 319, 330, 338	\TMP@EnsureCode
\mathbf{M}	$\dots \dots 94, 101, 102, 103, 104,$
\makeatletter 395	105, 106, 107, 108, 109, 110, 111
\MessageBreak	\mathbf{W}
\msg 387, 388, 398, 430, 431, 432, 433,	
	\write 23, 52, 187,
441, 442, 443, 444, 445, 557, 558, 559, 560, 567, 568, 569, 570	\write

\WriteText 415, 428, 431	28, 51, 56, 66, 75, 87, 114, 122,
\WriteUnused 386,	133, 552, 553, 555, 560, 563, 565
387, 397, 398, 472, 479, 486, 493	
\mathbf{X}	\mathbf{Y}
\x 14. 15. 18. 22. 26.	\v 564, 565, 570