## The infwarerr package

# Heiko Oberdiek <heiko.oberdiek at googlemail.com>

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#### Abstract

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

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## 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 IATEX's message texts \@ehc:

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

and \Gehd:

You're in trouble here. Try typing <return> to proceed

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

Try typing <return> to proceed

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
    \endlinechar=13 %
 4
    \catcode35=6 % #
 5
 6 \catcode39=12 % '
 7 \catcode44=12 %,
   \catcode45=12 % -
 9
   \catcode46=12 % .
   \catcode58=12 % :
10
   \catcode64=11 % @
11
    \catcode123=1 % {
12
    \catcode125=2 % }
13
    \expandafter\let\expandafter\x\csname ver@infwarerr.sty\endcsname
14
    \ifx\x\relax % plain-TeX, first loading
15
     \else
16
17
      \def\empty{}%
      \ifx\x\empty % LaTeX, first loading,
18
19
        % variable is initialized, but \ProvidesPackage not yet seen
20
      \else
        \expandafter\ifx\csname PackageInfo\endcsname\relax
21
          \def\x#1#2{%}
22
            \immediate\write-1{Package #1 Info: #2.}%
23
          }%
24
        \else
25
          26
27
        \x{infwarerr}{The package is already loaded}%
28
29
        \aftergroup\endinput
30
      \fi
    \fi
31
32 \endgroup%
Package identification:
33 \begingroup\catcode61\catcode48\catcode32=10\relax%
   \catcode13=5 % ^^M
34
    \endlinechar=13 %
35
36
    \catcode35=6 % #
   \catcode39=12 % '
```

```
\catcode40=12 % (
38
    \catcode41=12 % )
39
    \colone{1} \catcode44=12 % ,
40
    \catcode45=12 % -
41
    \catcode46=12 % .
42
43
    \catcode47=12 % /
44
    \catcode58=12 % :
45
    \catcode64=11 % @
    \catcode91=12 % [
46
    \catcode93=12 % ]
47
    \catcode123=1 % {
48
    \catcode125=2 % }
49
    \expandafter\ifx\csname ProvidesPackage\endcsname\relax
50
      \def \x#1#2#3[#4] {\endgroup}
51
         \immediate\write-1{Package: #3 #4}%
52
53
         \xdef#1{#4}%
      }%
54
55
    \else
      \def\x#1#2[#3]{\endgroup}
56
57
        #2[{#3}]%
         \ifx#1\@undefined
58
           \xdef#1{#3}%
59
60
         \int x#1\relax
61
           \xdef#1{#3}%
62
63
         \fi
      }%
64
65
    \fi
66 \expandafter\x\csname ver@infwarerr.sty\endcsname
67 \ProvidesPackage{infwarerr}%
    [2010/04/08 v1.3 Providing info/warning/error messages (HO)]%
```

#### 2.2 Catcodes

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

```
98
                                                                             \catcode#1=#2\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 \edef\InfWarErr@AtEnd{\InfWarErr@AtEnd\noexpand\endinput}
                                                                               LATEX detection
                                                               113 \begingroup
                                                                            \left| x=Y\right|
                                                               114
                                                                             \def\check#1{%
                                                               115
                                                                                  \@check{Generic}{#1}%
                                                               116
                                                                                  \@check{Package}{#1}%
                                                               117
                                                                                  \@check{Class}{#1}%
                                                               118
                                                               119
                                                               120
                                                                             \def\@check#1#2{%}
                                                               121
                                                                                  \expandafter\ifx\csname #1#2\endcsname\relax
                                                               122
                                                                                        \left| x=N\right|
                                                                                  \fi
                                                               123
                                                                            }%
                                                               124
                                                                             \check{Info}%
                                                               125
                                                                             \check{Warning}%
                                                               126
                                                               127
                                                                             \check{Error}%
                                                                             \@check{Package}{WarningNoLine}%
                                                               128
                                                               129
                                                                             \@check{Class}{WarningNoLine}%
                                                                130
                                                                             131
                                                                             132 \end{small} 
                                                               133 \ifx\x Y%
                                                                               Version for LATEX
                       \@PackageInfo
                                                                             \let\@PackageInfo\PackageInfo
                                                               134
        \@PackageInfoNoLine
                                                                             \def\@PackageInfoNoLine#1#2{%
                                                               135
                                                               136
                                                                                   \PackageInfo{#1}{#2}@gobble}%
                                                               137
                             \@ClassInfo
                                                               138
                                                                             \let\@ClassInfo\ClassInfo
             \@ClassInfoNoLine
                                                                139
                                                                             \def\@ClassInfoNoLine#1#2{%
                                                               140
                                                                                  \ClassInfo{#1}{#2}@gobble}%
                                                               141
               \@PackageWarning
                                                                             \let\@PackageWarning\PackageWarning
                                                               142
\@PackageWarningNoLine
                                                                             \let\@PackageWarningNoLine\PackageWarningNoLine
                                                               143
```

\catcode#1=\the\catcode#1\relax

97

```
\@ClassWarning
                                                                                                                              144
                                                                                                                                                        \let\@ClassWarning\ClassWarning
          \@ClassWarningNoLine
                                                                                                                                                        \let\@ClassWarningNoLine\ClassWarningNoLine
                                                                                                                              145
                                          \@PackageError
                                                                                                                                                         \let\@PackageError\PackageError
                                                                                                                              146
                                                    \@ClassError
                                                                                                                                                        \let\@ClassError\ClassError
                                                                                                                              147
                                                                                                                                                       \expandafter\InfWarErr@AtEnd
                                                                                                                              148
                                                                                                                              149 \fi%
                                                                                                                                                       Version for plain T<sub>E</sub>X
                                                                                                                               2.5
                          \InfWarErr@online
                                                                                                                              150 \begingroup\expandafter\endgroup
                                                                                                                              151 \verb|\ifcase| expandafter \verb|\ifx| csname input line no \verb|\endcsname| relax| \\
                                                                                                                              152
                                                                                                                                                                                             0 %
                                                                                                                              153
                                                                                                                                                                                    \else
                                                                                                                                                                                             \ifnum\inputlineno<0 %
                                                                                                                              154
                                                                                                                                                                                                        0 %
                                                                                                                              155
                                                                                                                              156
                                                                                                                                                                                              \else
                                                                                                                                                                                                        1 %
                                                                                                                              157
                                                                                                                              158
                                                                                                                                                                                               \fi
                                                                                                                                                                                    \fi
                                                                                                                              159
                                                                                                                              160
                                                                                                                                                      \def\InfWarErr@online{}%
                                                                                                                              161 \ensuremath{\setminus} else
                                                                                                                              162 \quad \texttt{\def}\ \texttt{\local{line}} \ \texttt{\def}\ \texttt{\d
                                                                                                                              163 \fi
         \InfWarErr@protected
                                                                                                                              164 \ensuremath{\mbox{\mbox{\mbox{\mbox{$164$}}}} \ensuremath{\mbox{\mbox{\mbox{$164$}}} \ensuremath{\mbox{\mbox{\mbox{$$c$}}} \ensuremath{\mbox{\mbox{$$a$}}} \ensuremath{\mbox{\mbox{$$c$}}} \ensuremath{\mbox{\mbox{$$a$}}} \ensuremath{\mbox{\mbox{$$a$}
                                                                                                                               165 \expandafter\ifx\csname protected\endcsname\relax
                                                                                                                              166 \def\InfWarErr@protected{}%
                                                                                                                              167 \ensuremath{\setminus} \text{else}
                                                                                                                              168 \let\InfWarErr@protected\protected
                                                                                                                              169 \fi
                          \InfWarErr@unused
                                                                                                                              170 \chardef\InfWarErr@unused=16 %
                                          \InfWarErr@ehc
                                                                                                                              171 \def\InfWarErr@ehc{%
                                                                                                                              172 Try typing \space <return> \space to proceed.\MessageBreak
                                                                                                                                                     If that doesn't work, type \space X <return> \space to quit.%
                                                                                                                              173
                                                                                                                              174 }
                                          \InfWarErr@ehd
                                                                                                                              175 \def\InfWarErr@ehd{%
                                                                                                                              176 You're in trouble here. \space\@ehc
                                                                                                                              177 }
\InfWarErr@GenericInfo
                                                                                                                              178 \verb| InfWarErr@protected\\ def\\ InfWarErr@GenericInfo#1#2{\%} |
                                                                                                                              179
                                                                                                                                                       \begingroup
                                                                                                                                                                    \let\on@line\InfWarErr@online
                                                                                                                              180
                                                                                                                                                                    \label{longdef_Qgobble} $$ \odd{f}\@gobble$$ $$ 1{}%
                                                                                                                              181
                                                                                                                                                                   \def\space{ }%
                                                                                                                              182
```

```
\def\MessageBreak{^^J#1}%
                                                                  184
                                                                                   \newlinechar=10 %
                                                                  185
                                                                                   \escapechar=92 %
                                                                  186
                                                                                   \immediate\write-1{#2\on@line.}%
                                                                  187
                                                                  188
                                                                              \endgroup
                                                                  189 }
\InfWarErr@GenericWarning
                                                                  190 \InfWarErr@protected\def\InfWarErr@GenericWarning#1#2{%
                                                                              \begingroup
                                                                  192
                                                                                   \let\on@line\InfWarErr@online
                                                                 193
                                                                                   \label{longdefQgobble} $$ \omega_0 \end{0.05cm} $$ \omega_0 \end{0.05
                                                                  194
                                                                                   \def\space{ }%
                                                                                   \def\@spaces{\space\space\space\space}%
                                                                 195
                                                                                   196
                                                                                   \newlinechar=10 %
                                                                 197
                                                                                   \escapechar=92 %
                                                                 198
                                                                                   \immediate\write\InfWarErr@unused{^^J#2\on@line.^^J}%
                                                                 199
                                                                 200
                                                                              \endgroup
                                                                 201 }
                                                                 Old TeX versions below 3.141 where ^^J is not working as newline in error message
    \InfWarErr@GenericError
                                                                 and help texts are not supported.
                                                                 {\tt 202 \label{locality} InfWarErr@GenericError#1#2#3#4{\%}}
                                                                 203
                                                                              \begingroup
                                                                                   \immediate\write\InfWarErr@unused{}%
                                                                 204
                                                                                   \def\space{ }%
                                                                 205
                                                                                   \def\@spaces{\space\space\space\%
                                                                 206
                                                                                   \let\@ehc\InfWarErr@ehc
                                                                 207
                                                                                   \let\@ehd\InfWarErr@ehd
                                                                 208
                                                                                   \let\on@line\InfWarErr@online
                                                                 209
                                                                                   \def\MessageBreak{^^J}%
                                                                 210
                                                                 211
                                                                                   \newlinechar=10 %
                                                                 212
                                                                                   \escapechar=92 %
                                                                 213
                                                                                   \edef\InfWarErr@help{\noexpand\errhelp{#4}}%
                                                                 214
                                                                                   \InfWarErr@help
                                                                                   215
                                                                 216
                                                                                   \errmessage{%
                                                                                        #2.^^J^^J%
                                                                 217
                                                                 218
                                                                                        #3^^J%
                                                                                        Type \space H <return> \space for immediate help.^^J ...^^J%
                                                                 219
                                                                 220
                                                                 221
                                                                              \endgroup
                                                                 222 }
                             \@PackageInfo
                                                                 223 \def\@PackageInfo#1#2{%
                                                                              \InfWarErr@GenericInfo{%
                                                                 224
                                                                 225
                                                                                   (#1) \@spaces\@spaces
                                                                 226
                                                                 227
                                                                                   Package #1 Info: #2%
                                                                 228
                                                                 229 }
              \@PackageInfoNoLine
                                                                 230 \def\@PackageInfoNoLine#1#2{%
                                                                              \@PackageInfo{#1}{#2\@gobble}%
                                                                 232 }
                                  \@ClassInfo
                                                                 233 \def\@ClassInfo#1#2{%
```

\def\@spaces{\space\space\space\%

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```
\InfWarErr@GenericInfo{%
                        234
                                (#1) \space\spaces\@spaces
                        235
                             }{%
                        236
                        237
                                Class #1 Info: #2%
                        238
                             }%
                        239 }
     \@ClassInfoNoLine
                        240 \def\@ClassInfoNoLine#1#2{%
                             \@ClassInfo{#1}{#2\@gobble}%
      \@PackageWarning
                        243 \def\@PackageWarning#1#2{%
                             \InfWarErr@GenericWarning{%
                        244
                                (#1)\@spaces\@spaces\@spaces
                        245
                        246
                        247
                               Package #1 Warning: #2%
                        248
                             }%
                        249 }
\@PackageWarningNoLine
                        250 \def\@PackageWarningNoLine#1#2{%
                              \@PackageWarning{#1}{#2\@gobble}%
                        252 }
        \@ClassWarning
                        253 \def\@ClassWarning#1#2{%
                        254
                             \InfWarErr@GenericWarning{%
                        255
                                (#1) \space\@spaces\@spaces
                        256
                        257
                               Class #1 Warning: #2%
                        258
                            }%
                        259 }
 \@ClassWarningNoLine
                        260 \def\@ClassWarningNoLine#1#2{%
                             \@ClassWarning{#1}{#2\@gobble}%
                        262 }
        \@PackageError
                        263 \def\@PackageError#1#2#3{%
                             \InfWarErr@GenericError{%
                        264
                                (#1)\@spaces\@spaces\@spaces
                        265
                        266
                        267
                               Package #1 Error: #2%
                        268
                                See the #1 package documentation for explanation.%
                        269
                             }{#3}%
                        270
                        271 }
          \@ClassError
                        272 \def\@ClassError#1#2#3{%
                        273
                             \InfWarErr@GenericError{%
                                (#1) \space\@spaces\@spaces
                        274
                             }{%
                        275
                               Class #1 Error: #2%
                        276
                        277
                             ጉ{%
                        278
                               See the #1 class documentation for explanation.%
                        279
                             }{#3}%
                        280 }
                        281 \InfWarErr@AtEnd%
                        282 \langle /package \rangle
```

#### 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{}%
293 \fi
294 \end{figure} Constant \end{figure} 294 \end{figure} Constant \end{figure} Constant
295 \quad \texttt{\long\def\@firstofone\#1\{\#1\}\%}
296 \fi
297 \expandafter\ifx\csname loop\endcsname\relax
            \expandafter\@firstofone
299 \ensuremath{\setminus} else
           \expandafter\@gobble
300
301 \fi
302 {%
303
               \def \loop #1 \repeat {% }
304
                     \def\body{#1}%
305
                     \iterate
              }%
306
               \def\iterate{%
307
308
                    \body
                           \let\next\iterate
309
310
                     \else
                           \let\next\relax
311
312
                     \fi
313
                     \next
               }%
314
               315
316 }%
317 \ensuremath{\mbox{\sc MestoreCatcodes}}
318 \count@=0 %
319 \loop
              \edef\RestoreCatcodes{%
320
                     \RestoreCatcodes
321
                     \catcode\the\count@=\the\catcode\count@\relax
324 \ifnum\count@<255 \%
325 \advance\count@ 1 %
326 \repeat
327
328 \ensuremath{\mbox{\sc NangeCatcodeInvalid#1#2}\%}
329
              \count@=#1\relax
330
             \loop
                    \catcode\count@=15 %
331
              \ifnum\count@<#2\relax
332
333
                     \advance\count@ 1 %
334
               \repeat
335 }
336 \def\RangeCatcodeCheck#1#2#3{%
               \count@=#1\relax
337
               \loop
338
                     \ifnum#3=\catcode\count@
339
                     \else
340
```

```
\errmessage{%
341
            Character \the\count@\space
342
            with wrong catcode \the\catcode\count@\space
343
            instead of \number#3%
          }%
345
       \fi
346
347
     \ifnum\count@<#2\relax
        \advance\count@ 1 %
348
349
     \repeat
350 }
351 \def\space{ }
352 \expandafter\ifx\csname LoadCommand\endcsname\relax
     \def\LoadCommand{\input infwarerr.sty\relax}%
354 \fi
355 \ensuremath{\mbox{def}\Test{\%}}
     \RangeCatcodeInvalid{0}{47}%
357
     \RangeCatcodeInvalid{58}{64}%
     \RangeCatcodeInvalid{91}{96}%
358
     \RangeCatcodeInvalid{123}{255}%
359
360
     \catcode`\@=12 %
     \color= \color= 0 \%
361
     \catcode`\%=14 %
362
363
     \LoadCommand
     \RangeCatcodeCheck{0}{36}{15}%
364
     \RangeCatcodeCheck{37}{37}{14}%
365
     \RangeCatcodeCheck{38}{47}{15}%
366
367
     \RangeCatcodeCheck{48}{57}{12}%
368
     \RangeCatcodeCheck{58}{63}{15}%
369
     \RangeCatcodeCheck{64}{64}{12}%
370
     \RangeCatcodeCheck{65}{90}{11}%
     \label{eq:RangeCatcodeCheck} $$\operatorname{CatcodeCheck}{91}_{91}_{15}_{\%}$
371
372
     \Reg CatcodeCheck \{92\} \{92\} \{0\}\%
373
     \RangeCatcodeCheck{93}{96}{15}%
374
     \RangeCatcodeCheck{97}{122}{11}%
     \RangeCatcodeCheck{123}{255}{15}%
375
376
     \RestoreCatcodes
377 }
378 \Test
379 \csname @@end\endcsname
380 \end
381 (/test1)
3.2 Macro tests
382 (*test2)
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 2010/04/08 v1.3 Test file for plain-TeX}
389 \catcode64=11 %
390 (/test2)
391 (*test3)
392 \NeedsTeXFormat{LaTeX2e}
393 \ProvidesFile{infwarerr-test3.tex}[2010/04/08 v1.3 Test file for LaTeX]
394 \RequirePackage{infwarerr}[2010/04/08]
395 \makeatletter
396 \let\OrgWrite\write
397 \chardef\WriteUnused=\Qunused
398 \def\msg#{\immediate\OrgWrite\WriteUnused}
399 (/test3)
```

```
400 (*test2 j test3)
401 \def\pkgname{PACKAGE}
402 \ensuremath{\mbox{\sc def\clsname}}\ensuremath{\mbox{\sc CLASS}}\ensuremath{\mbox{\sc def\clsname}}\ensuremath{\mbox{\sc def\clsname}}\ensuremath}\ensuremath{\mbox{\sc def\clsname}}\ensuremath}\ensuremath{\mbox{\sc def\clsname}}\ensuremath}\ensuremath{\mbox{\sc def\clsname}}\ensuremath}\ensuremath{\mbox{\sc def\clsname}}\ensuremath}\ensuremath{\mbox{\sc def\clsname}}\ensuremath}\ensuremath}\ensuremath{\mbox{\sc def\clsname}}\ensuremath}\ensuremath}\ensuremath}\ensuremath}\ensuremath}\ensuremath}
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#{%
          \@write{#1}%
410
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{%
          \OrgErrMessage{Test (\string#1) failed: #2}%
418
419 }
420 \def\TestWrite#1#2#3{%
           \ifnum\WriteNum=#2\relax
421
422
423
                \TestFailed#1{write stream number: \WriteNum <> #2}%
424
425
            \begingroup
426
                \let~\space
427
                \edef\TestString{#3}%
428
                \ifx\WriteText\TestString
429
                \else
430
                    \msg{}%
                    \msg{[\WriteText]}%
431
                    \mbox{\mbox{$\backslash$}msg{<>}}\%
432
                    \msg{[#3]}% hash-ok
433
                    \TestFailed#1{write text}%
434
435
                \fi
436
           \endgroup
437 }
438 \newtoks\ErrHelpToks
439 \def\errmessage#1{%
\msg{*********** error message ***********}%
441
           \msg{! #1}%
442
443
           \msg{********* help message ***********}%
444
           \msg{\the\errhelp}%
            446
           \xdef\ErrMessage{! #1}%
447 }
448 \def\TestInfo{%
449
           \@PackageInfo\pkgname\msgtext
           \TestWrite\@PackageInfo{-1}{%
450
                Package PACKAGE Info: MESSAGE^^J%
451
                452
          }%
453
454
           \@PackageInfoNoLine\pkgname\msgtext
455
           \TestWrite\@PackageInfoNoLine{-1}{%
456
               Package PACKAGE Info: MESSAGE^^J%
457
                (PACKAGE) ~~~~~~SECOND LINE.%
458
          }%
          \@ClassInfo\clsname\msgtext
459
          \TestWrite\@ClassInfo{-1}{%
460
               Class CLASS Info: MESSAGE^^J%
461
```

```
(CLASS)~~~~~SECOND LINE on input line \the\inputlineno.%
462
463
    }%
     \@ClassInfoNoLine\clsname\msgtext
464
     \TestWrite\@ClassInfoNoLine{-1}{%
465
       Class CLASS Info: MESSAGE^
466
       (CLASS) ~~~~~SECOND LINE.%
467
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
     \TestWrite\@PackageWarningNoLine\WriteUnused{%
479
480
481
       Package PACKAGE Warning: MESSAGE^^J%
       (PACKAGE) ~~~~~~SECOND LINE.%
482
483
484
     \@ClassWarning\clsname\msgtext
485
     \TestWrite\@ClassWarning\WriteUnused{%
486
       ^^J%
487
       Class CLASS Warning: MESSAGE^^J%
488
       (CLASS)~~~~SECOND LINE on input line \the\inputlineno.%
489
490
     }%
491
     \@ClassWarningNoLine\clsname\msgtext
492
     \TestWrite\@ClassWarningNoLine\WriteUnused{%
493
494
       Class CLASS Warning: MESSAGE^^J%
495
       (CLASS) ~~~~~SECOND LINE.%
496
497
       ^^J%
498
    }%
499 }
500 \def\TestError{%
501 \(\text3\) \let\write\OrgWrite
502 (test3)
          \def\plaindots{}
          \def\plaindots{.^^J ...^^J}
503 (test2)
     \@PackageError\pkgname\msgtext\hlptext
504
505
     \@TestError\@PackageError{%
506
       ! Package PACKAGE Error: MESSAGE^^J%
507
       (PACKAGE)~~~~~SECOND LINE.^^J%
508
509
       See the PACKAGE package documentation for explanation. ^{^{1}}J\%
510
       Type~~H <return>~~for immediate help\plaindots
511
     }{%
       HELP^^J%
512
       SECOND LINE%
513
     }%
514
     \@ClassError\clsname\msgtext\hlptext
515
     \@TestError\@ClassError{%
516
517
       ! Class CLASS Error: MESSAGE^^J%
518
       (CLASS)~~~~~SECOND LINE.^^J%
519
520
       See the CLASS class documentation for explanation. ^^J%
       Type~~H <return>~~for immediate help\plaindots
521
522
       HELP^^J%
523
```

```
SECOND LINE%
524
525
     }%
      \@PackageError\pkgname\msgtext\@ehc
526
      \@TestError\@PackageError{%
527
        ! Package PACKAGE Error: MESSAGE^^J%
528
        (PACKAGE)~~~~~SECOND LINE.^^J%
529
530
        See the PACKAGE package documentation for explanation.^^J%
531
        Type~~H <return>~~for immediate help\plaindots
532
     ጉ{%
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
543
        Type~~H <return>~~for immediate help\plaindots
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{%
550
     \begingroup
551
        \let~\space
552
        \left( x_{\#2}\right) 
553 (test3) \@onelevel@sanitize\x
554 \langle \text{test3} \rangle \@onelevel@sanitize\ErrMessage
555
        \ifx\x\ErrMessage
556
        \else
557
          \msg{}
          \msg{[\ErrMessage]}%
558
559
          \msg{<>}%
560
          \msg{[\x]}%
          \TestFailed#1{errmessage text}%
561
562
        \fi
        \edef\x{\the\ErrHelpToks}%
563
        \left( \frac{y}{\#3} \right)
564
565
        \int x x y
        \else
566
567
          \msg{}
568
          \msg{[\the\ErrHelpToks]}%
569
          \msg{<>}%
570
          \msg{[\y]}%
          \verb|\TestFailed#1{errhelp text}|| %
571
572
573
      \endgroup
574 }
575 \TestInfo
576 \TestWarning
577 \TestError
578 (/test2 j test3)
579 \langle \text{test2} \rangle \setminus \text{end}
580 \langle \text{test3} \rangle \setminus \text{@Qend}
```

#### 4 Installation

#### 4.1 Download

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

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  $T_FX$ :

```
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_infwarer} \begin{array}{ll} \text{infwarer.sty} & \rightarrow \text{tex/generic/oberdiek/infwarerr.sty} \\ \text{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{array}
```

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  $T_EX$  distribution (te $T_EX$ , mik $T_EX$ , ...) relies on file name databases, you must refresh these. For example, te $T_EX$  users run texhash or mktexlsr.

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

#### 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 infwarerr.pdf unpack_files output .
```

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

plain TEX: 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 pdfIAT<sub>F</sub>X:

```
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
     <license type='lppl1.3'/>
589
     <version number='1.3'/>
590
591
     <description>
       This package provides a complete set of macros for information,
592
       warning and error messages. Under LaTeX, the commands are
593
       wrappers for the corresponding LaTeX commands; under Plain TeX
594
595
       they are also available as complete implementations.
       596
       The package is part of the xref refid='oberdiek'>oberdiek</pref>
597
       bundle.
598
     </description>
599
     <documentation details='Package documentation'</pre>
600
         href='ctan:/macros/latex/contrib/oberdiek/infwarerr.pdf'/>
601
```

```
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.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.

## 7 Index

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