

The infwarerr package

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Abstract

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

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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 L^AT_EX's message texts `\@ehc`:

```
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 L^AT_EX and plain-T_EX. If L^AT_EX is detected, then the macros of this package will only be wrappers for L^AT_EX's macros. Otherwise L^AT_EX's macros will be mimicked for use with plain-T_EX.

2 Implementation

1 (*package)

2.1 Reload check and package identification

Reload check, especially if the package is not used with L^AT_EX.

```

2 \begingroup
3   \catcode44 12 % ,
4   \catcode45 12 % -
5   \catcode46 12 % .
6   \catcode58 12 % :
7   \catcode64 11 % @
8   \expandafter\let\expandafter\x\csname ver@infwarerr.sty\endcsname
9   \ifcase 0%
10    \ifx\x\relax % plain
11    \else
12      \ifx\x\empty % LaTeX
13      \else
14        1%
15      \fi
16    \fi
17  \else
18    \expandafter\ifx\csname PackageInfo\endcsname\relax
19      \def\x#1#2{%
20        \immediate\write-1{Package #1 Info: #2.}%
21      }%
22    \else
23      \def\x#1#2{\PackageInfo{#1}{#2, stopped}}%
24    \fi
25    \x{infwarerr}{The package is already loaded}%
26  \endgroup
27  \expandafter\endinput
28 \fi
29 \endgroup

```

Package identification:

```

30 \begingroup
31   \catcode40 12 % (
32   \catcode41 12 % )
33   \catcode44 12 % ,
34   \catcode45 12 % -
35   \catcode46 12 % .
36   \catcode47 12 % /
37   \catcode58 12 % :
38   \catcode64 11 % @
39   \expandafter\ifx\csname ProvidesPackage\endcsname\relax
40     \def\x#1#2#3[#4]{\endgroup
41       \immediate\write-1{Package: #3 #4}%
42       \xdef#1{#4}%
43     }%
44   \else
45     \def\x#1#2[#3]{\endgroup
46       #2[#3]}%

```

```

47      \ifx#1\relax
48      \xdef#1{#3}%
49      \fi
50    }%
51  \fi
52 \expandafter\x\csname ver@infwarerr.sty\endcsname
53 \ProvidesPackage{infwarerr}%
54 [2007/06/14 v1.1 Providing info/warning/message (H0)]

```

2.2 Catcodes

```

55 \expandafter\edef\csname InfWarErr@End\endcsname{%
56   \catcode39 \the\catcode39\relax % '
57   \catcode40 \the\catcode40\relax % (
58   \catcode41 \the\catcode41\relax % )
59   \catcode44 \the\catcode44\relax % ,
60   \catcode45 \the\catcode45\relax % -
61   \catcode46 \the\catcode46\relax % .
62   \catcode58 \the\catcode58\relax % :
63   \catcode60 \the\catcode60\relax % <
64   \catcode61 \the\catcode61\relax % =
65   \catcode62 \the\catcode62\relax % >
66   \catcode64 \the\catcode64\relax % @
67   \catcode94 \the\catcode94\relax % ^
68   \noexpand\endinput
69 }
70 \catcode39 12 % '
71 \catcode40 12 % (
72 \catcode41 12 % )
73 \catcode44 12 % ,
74 \catcode45 12 % -
75 \catcode46 12 % .
76 \catcode58 12 % :
77 \catcode60 12 % <
78 \catcode61 12 % =
79 \catcode62 12 % >
80 \catcode64 11 % @
81 \catcode94 7 % ^

```

2.3 L^AT_EX detection

```

82 \begingroup
83   \let\x=Y%
84   \def\check#1{%
85     \@check{Generic}{#1}%
86     \@check{Package}{#1}%
87     \@check{Class}{#1}%
88   }%
89   \def\@check#1#2{%
90     \expandafter\ifx\csname #1#2\endcsname\relax
91       \let\x=N%
92     \fi
93   }%
94   \check{Info}%
95   \check{Warning}%
96   \check{Error}%
97   \@check{Package}{WarningNoLine}%
98   \@check{Class}{WarningNoLine}%
99   \@check{}{@ehc}%
100  \@check{}{@ehd}%
101 \expandafter\endgroup
102 \ifx\x Y%

```

2.4 Version for L^AT_EX

```

\@PackageInfo
103 \let\@PackageInfo\PackageInfo

\@PackageInfoNoLine
104 \def\@PackageInfoNoLine#1#2{%
105     \PackageInfo{#1}{#2\@gobble}%
106 }%

\@ClassInfo
107 \let\@ClassInfo\ClassInfo

\@ClassInfoNoLine
108 \def\@ClassInfoNoLine#1#2{%
109     \ClassInfo{#1}{#2\@gobble}%
110 }%

\@PackageWarning
111 \let\@PackageWarning\PackageWarning

\@PackageWarningNoLine
112 \let\@PackageWarningNoLine\PackageWarningNoLine

\@ClassWarning
113 \let\@ClassWarning\ClassWarning

\@ClassWarningNoLine
114 \let\@ClassWarningNoLine\ClassWarningNoLine

\@PackageError
115 \let\@PackageError\PackageError

\@ClassError
116 \let\@ClassError\ClassError

117 \csname fi\endcsname
118 \InfWarErr@End
119 \fi

```

2.5 Version for plain-T_EX

```

\InfWarErr@online
120 \begingroup\expandafter\endgroup
121 \ifcase\expandafter\ifx\csname inputlineno\endcsname\relax
122     0 %
123     \else
124         \ifnum\inputlineno<0 %
125             0 %
126         \else
127             1 %
128         \fi
129     \fi
130 \def\InfWarErr@online{}%
131 \else
132 \def\InfWarErr@online{ on input line \the\inputlineno}%
133 \fi

```

\InfWarErr@protected

```
134 \begingroup\expandafter\expandafter\expandafter\endgroup
135 \expandafter\ifx\csname protected\endcsname\relax
136   \def\InfWarErr@protected{}%
137 \else
138   \let\InfWarErr@protected\protected
139 \fi
```

\InfWarErr@unused

```
140 \chardef\InfWarErr@unused=16 %
```

\InfWarErr@ehc

```
141 \def\InfWarErr@ehc{%
142   Try typing \space <return> \space to proceed.\MessageBreak
143   If that doesn't work, type \space X <return> \space to quit.%
144 }
```

\InfWarErr@ehd

```
145 \def\InfWarErr@ehd{%
146   You're in trouble here. \space\@ehc
147 }
```

\InfWarErr@GenericInfo

```
148 \InfWarErr@protected\def\InfWarErr@GenericInfo#1#2{%
149   \begingroup
150     \let\on@line\InfWarErr@online
151     \long\def\@gobble##1{%
152       \def\space{ }%
153       \def\@spaces{\space\space\space\space}%
154       \def\MessageBreak{^^J#1}%
155       \newlinechar=10 %
156       \immediate\write-1{#2\on@line.}%
157     \endgroup
158 }
```

\InfWarErr@GenericWarning

```
159 \InfWarErr@protected\def\InfWarErr@GenericWarning#1#2{%
160   \begingroup
161     \let\on@line\InfWarErr@online
162     \long\def\@gobble##1{%
163       \def\space{ }%
164       \def\@spaces{\space\space\space\space}%
165       \def\MessageBreak{^^J#1}%
166       \newlinechar=10 %
167       \immediate\write\InfWarErr@unused{^^J#2\on@line.^^J}%
168     \endgroup
169 }
```

\InfWarErr@GenericError Old TeX versions below 3.141 where ^^J is not working as newline in error message and help texts are not supported.

```
170 \InfWarErr@protected\def\InfWarErr@GenericError#1#2#3#4{%
171   \begingroup
172     \immediate\write\InfWarErr@unused{}%
173     \newlinechar=10 %
174     \def\space{ }%
175     \def\@spaces{\space\space\space\space}%
176     \let\@ehc\InfWarErr@ehc
177     \let\@ehd\InfWarErr@ehd
178     \let\on@line\InfWarErr@online
179     \def\MessageBreak{^^J}%
180     \edef\InfWarErr@help{\noexpand\errhelp{#4}}%
```

```

181 \InfWarErr@help
182 \def\MessageBreak{^^J#1}%
183 \errmessage{%
184   #2.^^J^^J%
185   #3^^J%
186   Type \space H <return> \space for immediate help.^^J ...^^J%
187 }%
188 \endgroup
189 }

```

\@PackageInfo

```

190 \def\@PackageInfo#1#2{%
191   \InfWarErr@GenericInfo{%
192     (#1) \@spaces\@spaces\@spaces
193   }{%
194     Package #1 Info: #2%
195   }%
196 }

```

\@PackageInfoNoLine

```

197 \def\@PackageInfoNoLine#1#2{%
198   \@PackageInfo{#1}{#2\@gobble}%
199 }

```

\@ClassInfo

```

200 \def\@ClassInfo#1#2{%
201   \InfWarErr@GenericInfo{%
202     (#1) \space\space\@spaces\@spaces
203   }{%
204     Class #1 Info: #2%
205   }%
206 }

```

\@ClassInfoNoLine

```

207 \def\@ClassInfoNoLine#1#2{%
208   \@ClassInfo{#1}{#2\@gobble}%
209 }

```

\@PackageWarning

```

210 \def\@PackageWarning#1#2{%
211   \InfWarErr@GenericWarning{%
212     (#1)\@spaces\@spaces\@spaces\@spaces
213   }{%
214     Package #1 Warning: #2%
215   }%
216 }

```

\@PackageWarningNoLine

```

217 \def\@PackageWarningNoLine#1#2{%
218   \@PackageWarning{#1}{#2\@gobble}%
219 }

```

\@ClassWarning

```

220 \def\@ClassWarning#1#2{%
221   \InfWarErr@GenericWarning{%
222     (#1) \space\@spaces\@spaces\@spaces
223   }{%
224     Class #1 Warning: #2%
225   }%
226 }

```

\@ClassWarningNoLine

```
227 \def\@ClassWarningNoLine#1#2{%
228   \@ClassWarning{#1}{#2@gobble}%
229 }
```

\@PackageError

```
230 \def\@PackageError#1#2#3{%
231   \InfWarErr@GenericError{%
232     (#1)\@spaces\@spaces\@spaces\@spaces
233   }{%
234     Package #1 Error: #2%
235   }{%
236     See the #1 package documentation for explanation.%
237   }{#3}%
238 }
```

\@ClassError

```
239 \def\@ClassError#1#2#3{%
240   \InfWarErr@GenericError{%
241     (#1) \space\@spaces\@spaces\@spaces
242   }{%
243     Class #1 Error: #2%
244   }{%
245     See the #1 class documentation for explanation.%
246   }{#3}%
247 }
```

```
248 \InfWarErr@End
249 \endpackage
```

3 Test

```
250 <*test1>
251 \let\PackageInfo\relax
252 \input infwarerr.sty\relax
253 \let\OrgWrite\write
254 \chardef\WriteUnused=16 %
255 \def\msg#{\immediate\OrgWrite\WriteUnused}
256 \msg{File: infwarerr-test1.tex 2007/06/14 v1.1 Test file for plain-Tex}
257 \catcode64=11 %
258 </test1>

259 <*test2>
260 \NeedsTeXFormat{LaTeX2e}
261 \ProvidesFile{infwarerr-test2.tex}[2007/06/14 v1.1 Test file for LaTeX]
262 \RequirePackage{infwarerr}
263 \makeatletter
264 \let\OrgWrite\write
265 \chardef\WriteUnused=\@unused
266 \def\msg#{\immediate\OrgWrite\WriteUnused}
267 </test2>

268 <*test1 | test2>
269 \def\pkgname{PACKAGE}
270 \def\clsname{CLASS}
271 \def\msgtext{MESSAGE\MessageBreak SECOND LINE}
272 \def\hlptext{HELP\MessageBreak SECOND LINE}
273
274 \let\OrgWrite\write
275 \let\OrgErrMessage\errmessage
276
277 \def\write#1#{%
```

```

278 \@write{#1}%
279 }
280 \def\@write#1#2{%
281   \OrgWrite#1{#2}%
282   \xdef\WriteNum{\number#1}%
283   \xdef\WriteText{#2}%
284 }
285 \def\TestFailed#1#2{%
286   \OrgErrMessage{Test (\string#1) failed: #2}%
287 }
288 \def\TestWrite#1#2#3{%
289   \ifnum\WriteNum=#2\relax
290   \else
291     \TestFailed#1{write stream number: \WriteNum <> #2}%
292   \fi
293   \begingroup
294     \let~\space
295     \edef\TestString{#3}%
296     \ifx\WriteText\TestString
297     \else
298       \msg{ }%
299       \msg{[\WriteText]}%
300       \msg{<>}%
301       \msg{[#3]}% hash-ok
302       \TestFailed#1{write text}%
303     \fi
304   \endgroup
305 }
306 \newtoks\ErrHelpToks
307 \def\errmessage#1{%
308   \global\ErrHelpToks=\expandafter{\the\errhelp}%
309   \msg{***** error message *****}%
310   \msg{! #1}%
311   \msg{***** help message *****}%
312   \msg{\the\errhelp}%
313   \msg{*****}%
314   \xdef\ErrorMessage{! #1}%
315 }
316 \def\TestInfo{%
317   \@PackageInfo\pkgname\msgtext
318   \TestWrite\@PackageInfo{-1}{%
319     Package PACKAGE Info: MESSAGE^^J%
320     (PACKAGE)~~~~~SECOND LINE on input line \the\inputlineno.%
321   }%
322   \@PackageInfoNoLine\pkgname\msgtext
323   \TestWrite\@PackageInfoNoLine{-1}{%
324     Package PACKAGE Info: MESSAGE^^J%
325     (PACKAGE)~~~~~SECOND LINE.%
326   }%
327   \@ClassInfo\clsname\msgtext
328   \TestWrite\@ClassInfo{-1}{%
329     Class CLASS Info: MESSAGE^^J%
330     (CLASS)~~~~~SECOND LINE on input line \the\inputlineno.%
331   }%
332   \@ClassInfoNoLine\clsname\msgtext
333   \TestWrite\@ClassInfoNoLine{-1}{%
334     Class CLASS Info: MESSAGE^^J%
335     (CLASS)~~~~~SECOND LINE.%
336   }%
337 }
338 \def\TestWarning{%
339   \@PackageWarning\pkgname\msgtext

```



```

340 \TestWrite\@PackageWarning\WriteUnused{%
341   ^^J%
342   Package PACKAGE Warning: MESSAGE^^J%
343   (PACKAGE)~~~~~SECOND LINE on input line \the\inputlineno.%
344   ^^J%
345 }%
346 \@PackageWarningNoLine\pkgname\msgtext
347 \TestWrite\@PackageWarningNoLine\WriteUnused{%
348   ^^J%
349   Package PACKAGE Warning: MESSAGE^^J%
350   (PACKAGE)~~~~~SECOND LINE.%
351   ^^J%
352 }%
353 \@ClassWarning\clsname\msgtext
354 \TestWrite\@ClassWarning\WriteUnused{%
355   ^^J%
356   Class CLASS Warning: MESSAGE^^J%
357   (CLASS)~~~~~SECOND LINE on input line \the\inputlineno.%
358   ^^J%
359 }%
360 \@ClassWarningNoLine\clsname\msgtext
361 \TestWrite\@ClassWarningNoLine\WriteUnused{%
362   ^^J%
363   Class CLASS Warning: MESSAGE^^J%
364   (CLASS)~~~~~SECOND LINE.%
365   ^^J%
366 }%
367 }
368 \def\TestError{%
369 (test2) \let\write\OrgWrite
370 (test2) \def\plaindots{}
371 (test1) \def\plaindots{.^^J ...^^J}
372 \@PackageError\pkgname\msgtext\hlptext
373 \@TestError\@PackageError{%
374   ! Package PACKAGE Error: MESSAGE^^J%
375   (PACKAGE)~~~~~SECOND LINE.^^J%
376   ^^J%
377   See the PACKAGE package documentation for explanation.^^J%
378   Type~~H <return>~~for immediate help\plaindots
379 }{%
380   HELP^^J%
381   SECOND LINE%
382 }%
383 \@ClassError\clsname\msgtext\hlptext
384 \@TestError\@ClassError{%
385   ! Class CLASS Error: MESSAGE^^J%
386   (CLASS)~~~~~SECOND LINE.^^J%
387   ^^J%
388   See the CLASS class documentation for explanation.^^J%
389   Type~~H <return>~~for immediate help\plaindots
390 }{%
391   HELP^^J%
392   SECOND LINE%
393 }%
394 \@PackageError\pkgname\msgtext\@ehc
395 \@TestError\@PackageError{%
396   ! Package PACKAGE Error: MESSAGE^^J%
397   (PACKAGE)~~~~~SECOND LINE.^^J%
398   ^^J%
399   See the PACKAGE package documentation for explanation.^^J%
400   Type~~H <return>~~for immediate help\plaindots
401 }{%

```

```

402   Try typing~~<return>~~to proceed.^^J%
403   If that doesn't work, type~~X <return>~~to quit.%
404 }%
405 \@PackageError\pkgname\msgtext\@ehd
406 \@TestError\@PackageError{%
407   ! Package PACKAGE Error: MESSAGE^^J%
408   (PACKAGE)~~~~~SECOND LINE.^^J%
409   ^^J%
410   See the PACKAGE package documentation for explanation.^^J%
411   Type~~H <return>~~for immediate help\plaindots
412 }{%
413   You're in trouble here.~~Try typing~~<return>~~to proceed.^^J%
414   If that doesn't work, type~~X <return>~~to quit.%
415 }%
416 }
417 \def\@TestError#1#2#3{%
418   \begingroup
419     \let~\space
420     \edef\x{#2}%
421     \test2 \@onelevel@sanitize\x
422     \test2 \@onelevel@sanitize\ErrMessage
423     \ifx\x\ErrMessage
424       \else
425         \msg{}%
426         \msg{[\ErrMessage]}%
427         \msg{<>}%
428         \msg{[\x]}%
429         \TestFailed#1{errmessage text}%
430       \fi
431       \edef\x{\the\ErrHelpToks}%
432       \edef\y{#3}%
433       \ifx\x\y
434         \else
435           \msg{}%
436           \msg{[\the\ErrHelpToks]}%
437           \msg{<>}%
438           \msg{[\y]}%
439           \TestFailed#1{errhelp text}%
440         \fi
441       \endgroup
442 }
443 \TestInfo
444 \TestWarning
445 \TestError
446 </test1 | test2>
447 <test1>\end
448 <test2>\@@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.

¹<http://ftp.ctan.org/tex-archive/>

CTAN:macros/latex/contrib/oberdiek/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- \TeX :

```
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):

```
infwarerr.sty      → tex/generic/oberdiek/infwarerr.sty
infwarerr.pdf      → doc/latex/oberdiek/infwarerr.pdf
infwarerr-test1.tex → doc/latex/oberdiek/infwarerr-test1.tex
infwarerr-test2.tex → doc/latex/oberdiek/infwarerr-test2.tex
infwarerr.dtx      → source/latex/oberdiek/infwarerr.dtx
```

If you have a `docstrip.cfg` that configures and enables `docstrip`’s TDS installing feature, then some files can already be in the right place, see the documentation of `docstrip`.

4.4 Refresh file name databases

If your \TeX distribution (te \TeX , mi \TeX , ...) relies on file name databases, you must refresh these. For example, te \TeX users run `texhash` or `mktextlsr`.

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 pdfL^AT_EX:

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

5 History

[2007/04/26 v1.0]

- First version.

[2007/06/14 v1.1]

- Small fixes

6 Index

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