

# 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<sup>A</sup>T<sub>E</sub>X'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<sup>A</sup>T<sub>E</sub>X and plain-T<sub>E</sub>X. If L<sup>A</sup>T<sub>E</sub>X is detected, then the macros of this package will only be wrappers for L<sup>A</sup>T<sub>E</sub>X's macros. Otherwise L<sup>A</sup>T<sub>E</sub>X's macros will be mimicked for use with plain-T<sub>E</sub>X.

## 2 Implementation

1 (\*package)

### 2.1 Reload check and package identification

Reload check, especially if the package is not used with L<sup>A</sup>T<sub>E</sub>X.

```

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

```

```

47   }%
48   \fi
49 \expandafter\x\csname ver@infwarerr.sty\endcsname
50 \ProvidesPackage{infwarerr}%
51 [2007/04/26 v1.0 Providing info/warning/message (HO)]

```

## 2.2 Catcodes

```

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

```

## 2.3 L<sup>A</sup>T<sub>E</sub>X detection

```

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

```

## 2.4 Version for L<sup>A</sup>T<sub>E</sub>X

```

\@PackageInfo
100 \let\@PackageInfo\PackageInfo

```

```

\@PackageInfoNoLine
101 \def\@PackageInfoNoLine#1#2{%
102   \PackageInfo{#1}{#2\@gobble}%
103 }%

\@ClassInfo
104 \let\@ClassInfo\ClassInfo

\@ClassInfoNoLine
105 \def\@ClassInfoNoLine#1#2{%
106   \ClassInfo{#1}{#2\@gobble}%
107 }%

\@PackageWarning
108 \let\@PackageWarning\PackageWarning

\@PackageWarningNoLine
109 \let\@PackageWarningNoLine\PackageWarningNoLine

\@ClassWarning
110 \let\@ClassWarning\ClassWarning

\@ClassWarningNoLine
111 \let\@ClassWarningNoLine\ClassWarningNoLine

\@PackageError
112 \let\@PackageError\PackageError

\@ClassError
113 \let\@ClassError\ClassError

114 \csname fi\endcsname
115 \InfWarErr@End
116 \fi

```

## 2.5 Version for plain-TeX

```

\InfWarErr@online
117 \begingroup\expandafter\endgroup
118 \ifcase\expandafter\ifx\csname inputlineno\endcsname\relax
119   0 %
120   \else
121     \ifnum\inputlineno<0 %
122       0 %
123     \else
124       1 %
125     \fi
126   \fi
127 \def\InfWarErr@online{}%
128 \else
129 \def\InfWarErr@online{ on input line \the\inputlineno}%
130 \fi

\InfWarErr@protected
131 \begingroup\expandafter\expandafter\expandafter\endgroup
132 \expandafter\ifx\csname protected\endcsname\relax
133 \def\InfWarErr@protected{}%
134 \else
135 \let\InfWarErr@protected\protected
136 \fi

```

```

\InfWarErr@unused
137 \chardef\InfWarErr@unused=16 %

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

\InfWarErr@ehd
142 \def\InfWarErr@ehd{%
143   You're in trouble here. \space\@ehc
144 }

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

\InfWarErr@GenericWarning
155 \InfWarErr@protected\def\InfWarErr@GenericWarning#1#2{%
156   \begingroup
157     \let\on@line\InfWarErr@online
158     \long\def\@gobble##1{%
159       \def\@spaces{\space\space\space\space}%
160       \def\MessageBreak{^^J#1}%
161       \newlinechar=10 %
162       \immediate\write\InfWarErr@unused{^^J#2\on@line.^^J}%
163     \endgroup
164 }

\InfWarErr@GenericError Old TeX versions below 3.141 where ^^J is not working as newline in error message
and help texts are not supported.
165 \InfWarErr@protected\def\InfWarErr@GenericError#1#2#3#4{%
166   \begingroup
167     \immediate\write\InfWarErr@unused{%
168       \newlinechar=10 %
169       \def\@spaces{\space\space\space\space}%
170       \let\@ehc\InfWarErr@ehc
171       \let\@ehd\InfWarErr@ehd
172       \let\on@line\InfWarErr@online
173       \def\MessageBreak{^^J}%
174       \edef\InfWarErr@help{\noexpand\errhelp{#4}}%
175       \InfWarErr@help
176       \def\MessageBreak{^^J#1}%
177       \errmessage{%
178         #2.^^J^^J%
179         #3^^J%
180         Type \space H <return> \space for immediate help%
181       }%
182     \endgroup
183 }

```

\@PackageInfo

```
184 \def\@PackageInfo#1#2{%
185   \InfWarErr@GenericInfo{%
186     (#1) \@spaces\@spaces\@spaces
187   }{%
188     Package #1 Info: #2%
189   }%
190 }
```

\@PackageInfoNoLine

```
191 \def\@PackageInfoNoLine#1#2{%
192   \@PackageInfo{#1}{#2\@gobble}%
193 }
```

\@ClassInfo

```
194 \def\@ClassInfo#1#2{%
195   \InfWarErr@GenericInfo{%
196     (#1) \space\space\@spaces\@spaces
197   }{%
198     Class #1 Info: #2%
199   }%
200 }
```

\@ClassInfoNoLine

```
201 \def\@ClassInfoNoLine#1#2{%
202   \@ClassInfo{#1}{#2\@gobble}%
203 }
```

\@PackageWarning

```
204 \def\@PackageWarning#1#2{%
205   \InfWarErr@GenericWarning{%
206     (#1)\@spaces\@spaces\@spaces\@spaces
207   }{%
208     Package #1 Warning: #2%
209   }%
210 }
```

\@PackageWarningNoLine

```
211 \def\@PackageWarningNoLine#1#2{%
212   \@PackageWarning{#1}{#2\@gobble}%
213 }
```

\@ClassWarning

```
214 \def\@ClassWarning#1#2{%
215   \InfWarErr@GenericWarning{%
216     (#1) \space\@spaces\@spaces\@spaces
217   }{%
218     Class #1 Warning: #2%
219   }%
220 }
```

\@ClassWarningNoLine

```
221 \def\@ClassWarningNoLine#1#2{%
222   \@ClassWarning{#1}{#2\@gobble}%
223 }
```

\@PackageError

```
224 \def\@PackageError#1#2#3{%
225   \InfWarErr@GenericError{%
226     (#1)\@spaces\@spaces\@spaces\@spaces
```

```

227 }{%
228   Package #1 Error: #2%
229 }{%
230   See the #1 package documentation for explanation.%
231 }{#3}%
232 }

```

\@ClassError

```

233 \def\@ClassError#1#2#3{%
234   \InfWarErr@GenericError{%
235     (#1) \space\@spaces\@spaces\@spaces
236   }{%
237     Class #1 Error: #2%
238   }{%
239     See the #1 class documentation for explanation.%
240   }{#3}%
241 }

242 \InfWarErr@End
243 \</package>

```

### 3 Test

```

244 <*test1>
245 \let\PackageInfo\relax
246 \input infwarerr.sty\relax
247 \let\OrgWrite\write
248 \chardef\WriteUnused=16 %
249 \def\msg#{\immediate\OrgWrite\WriteUnused}
250 \msg{File: infwarerr-test1.tex 2007/04/26 v1.0 Test file for plain-TeX}
251 \catcode64=11 %
252 \</test1>

253 <*test2>
254 \NeedsTeXFormat{LaTeX2e}
255 \ProvidesFile{infwarerr-test2.tex}[2007/04/26 v1.0 Test file for LaTeX]
256 \RequirePackage{infwarerr}
257 \makeatletter
258 \let\OrgWrite\write
259 \chardef\WriteUnused=\@unused
260 \def\msg#{\immediate\OrgWrite\WriteUnused}
261 \</test2>

262 <*test1 | test2>
263 \def\pkgname{PACKAGE}
264 \def\clsname{CLASS}
265 \def\msgtext{MESSAGE\MessageBreak SECOND LINE}
266 \def\hlptext{HELP\MessageBreak SECOND LINE}
267
268 \let\OrgWrite\write
269 \let\OrgErrorMessage\errmessage
270
271 \def\write#1#{%
272   \@write{#1}%
273 }
274 \def\@write#1#2{%
275   \OrgWrite#1{#2}%
276   \xdef\WriteNum{\number#1}%
277   \xdef\WriteText{#2}%
278 }
279 \def\TestFailed#1#2{%
280   \OrgErrorMessage{Test (\string#1) failed: #2}%
281 }

```

```

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

```



```

344     (PACKAGE)~~~~~SECOND LINE.%
345     ^^J%
346 }%
347 \@ClassWarning\clsname\msgtext
348 \TestWrite\@ClassWarning\WriteUnused{%
349     ^^J%
350     Class CLASS Warning: MESSAGE^^J%
351     (CLASS)~~~~~SECOND LINE on input line \the\inputlineno.%
352     ^^J%
353 }%
354 \@ClassWarningNoLine\clsname\msgtext
355 \TestWrite\@ClassWarningNoLine\WriteUnused{%
356     ^^J%
357     Class CLASS Warning: MESSAGE^^J%
358     (CLASS)~~~~~SECOND LINE.%
359     ^^J%
360 }%
361 }
362 \def\TestError{%
363 (test2) \let\write\OrgWrite
364 \@PackageError\pkgname\msgtext\hlptext
365 \@TestError\@PackageError{%
366     ! Package PACKAGE Error: MESSAGE^^J%
367     (PACKAGE)~~~~~SECOND LINE.^^J%
368     ^^J%
369     See the PACKAGE package documentation for explanation.^^J%
370     Type~~H <return>~~for immediate help%
371 }{%
372     HELP^^J%
373     SECOND LINE%
374 }%
375 \@ClassError\clsname\msgtext\hlptext
376 \@TestError\@ClassError{%
377     ! Class CLASS Error: MESSAGE^^J%
378     (CLASS)~~~~~SECOND LINE.^^J%
379     ^^J%
380     See the CLASS class documentation for explanation.^^J%
381     Type~~H <return>~~for immediate help%
382 }{%
383     HELP^^J%
384     SECOND LINE%
385 }%
386 \@PackageError\pkgname\msgtext\@ehc
387 \@TestError\@PackageError{%
388     ! Package PACKAGE Error: MESSAGE^^J%
389     (PACKAGE)~~~~~SECOND LINE.^^J%
390     ^^J%
391     See the PACKAGE package documentation for explanation.^^J%
392     Type~~H <return>~~for immediate help%
393 }{%
394     Try typing~~<return>~~to proceed.^^J%
395     If that doesn't work, type~~X <return>~~to quit.%
396 }%
397 \@PackageError\pkgname\msgtext\@ehd
398 \@TestError\@PackageError{%
399     ! Package PACKAGE Error: MESSAGE^^J%
400     (PACKAGE)~~~~~SECOND LINE.^^J%
401     ^^J%
402     See the PACKAGE package documentation for explanation.^^J%
403     Type~~H <return>~~for immediate help%
404 }{%
405     You're in trouble here.~~Try typing~~<return>~~to proceed.^^J%

```

```

406     If that doesn't work, type~~X <return>~~to quit.%
407 }%
408 }
409 \def\@TestError#1#2#3{%
410   \begingroup
411     \let~\space
412     \edef\x{#2}%
413     \test2) \@onelevel@sanitize\x
414     \test2) \@onelevel@sanitize\ErrorMessage
415     \ifx\x\ErrorMessage
416       \else
417         \msg{}%
418         \msg{[\ErrorMessage]}%
419         \msg{<>}%
420         \msg{[\x]}%
421         \TestFailed#1{errmessage text}%
422       \fi
423       \edef\x{\the\ErrHelpToks}%
424       \edef\y{#3}%
425       \ifx\x\y
426         \else
427           \msg{}%
428           \msg{[\the\ErrHelpToks]}%
429           \msg{<>}%
430           \msg{[\y]}%
431           \TestFailed#1{errhelp text}%
432         \fi
433       \endgroup
434 }
435 \TestInfo
436 \TestWarning
437 \TestError
438 </test1 | test2>
439 \test1\end
440 \test2\@@end

```

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

### 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
```

---

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

**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 `mktexlsr`.

### 4.5 Some details for the interested

**Attached source.** The PDF documentation on CTAN also includes the `.dtx` source file. It can be extracted by AcrobatReader 6 or higher. Another option is `pdftk`, e.g. unpack the file into the current directory:

```
pdftk 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 pdf $\LaTeX$ :

```
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.

## 6 Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

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