# Compatibility mode for $\LaTeX 2_{\varepsilon}$ emulating $\LaTeX 2.09$

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## 1 Introduction

The file latex209.def is read in by  $\LaTeX 2_{\varepsilon}$  whenever it finds a \documentstyle rather than \documentclass command at the beginning of the file. This indicates a  $\LaTeX 2.09$  document, which should be processed in *compatibility mode*.

Any document which compiled under LATEX 2.09 should compile under compatibility mode, unless it uses low-level commands such as \tenrm.

## 2 The docstrip modules

The following modules are used in the implementation to direct docstrip in generating the external files:

```
driver
          produce a documentation driver file
head
          produce the beginning of latex209.def
tail
          produce the end of latex209.def
article
          produce article.sty
book
         produce book.sty
report
         produce report.sty
slides
         produce slides.sty
letter
         produce letter.sty
bezier
         produce bezier.sty
fleqn
          produce fleqn.sty
legno
          produce legno.sty
openbib
         produce openbib.sty
```

Between the head and tail of latex209.def, the code for oldlfont.sty is included, so LATEX 2.09 documents will automatically be run simulating the OFSS.

## 3 Driver

This section contains the driver for this documentation.

- $_1$  (\*driver)
- 2 \documentclass{ltxdoc}
- 3 \DisableCrossrefs
- 4 % \OnlyDescription
- 5 \begin{document}
- 6 \DocInput{latex209.dtx}
- 7 \end{document}
- 8 (/driver)

# 4 Beginning of latex209.def

This section describes the beginning of the file latex209.def.

9 (\*head)

#### 4.1 Identification

This file needs to be run with  $\LaTeX 2_{\varepsilon}$ .

```
10 \NeedsTeXFormat{LaTeX2e}
Describe the file.
11 \ProvidesFile{latex209.def}[1998/05/13 v0.52 Standard LaTeX file]
Announce compatibility mode to the user.
12 \if@compatibility
13 \expandafter\endinput
```

```
13 \expandafter\endinput
14 \else
   \typeout{^^J\space
15
16 \@spaces\@spaces\space Entering LaTeX 2.09 COMPATIBILITY MODE^^J\space
   18 \space\space!!WARNING!!\space
19 \space\space!!WARNING!!\space
20 \space\space!!WARNING!!\space
21 \space\space\space!!WARNING!!\space\space\space
                                               ^^J\space
22 ^^J\space
23 This mode attempts to provide an emulation of the LaTeX 2.09^^J\space
24 author environment so that OLD documents can be successfully^^J\space
25 processed. It should NOT be used for NEW documents!^^J\space
27 New documents should use Standard LaTeX conventions and start^^J\space
28 with the \string\documentclass\space command.^^J\space
29 ^^J\space
30 Compatibility mode is UNLIKELY TO WORK with LaTeX 2.09 style^^J\space
31 files that change any internal macros, especially not with^J\space
32 those that change the FONT SELECTION or OUTPUT ROUTINES.^^J\space
33 ^^J\space
                            MUST BE UPDATED to use^^J\space
34 Therefore such style files
35 \@spaces\@spaces\space
                            Current Standard LaTeX: LaTeX2e.^^J\space
36 If you suspect that you may be using such a style file, which^^J\space
37 is probably very, very old by now, then you should attempt to^^J\space
38 get it updated by sending a copy of this error message to the^^J\space
39 author of that file.^^J\space
41 \fi
```

## 4.2 Compatibility flag

\@compatibilitytrue

IFTEX  $2_{\varepsilon}$  has a flag \if@compatibility which can be used by document classes or packages to determine whether they are running in compatibility mode or not. This flag is set true by this file.

42 \@compatibilitytrue

## 4.3 Removing features

These  $\LaTeX$   $2_{\varepsilon}$  commands are switched off in compatibility mode. This is done by \usepackage saving the old definition, and redefining the command to call \@latex@e@error \listfiles before executing the old version. \ensuremath \lrbox 43 \def\@tempa#1#2{% \expandafter\let\csname @@\string#1\endcsname#1% \newcommand 44 45 \edef#1{% \noexpand\@latex@e@error{\noexpand#2}% 46 47 \expandafter\noexpand\csname @@\string#1\endcsname }% 48 50 \@tempa\usepackage\usepackage 51 \@tempa\listfiles\listfiles 52 \@tempa\ensuremath\ensuremath

```
53 \@tempa\lrbox{\begin{lrbox}}%
54 \@tempa\@xargdef{\newcommand{cmd}[args][def]}%
```

\@latex@e@error@

This error is produced if a user uses a  $\LaTeX$   $2_{\varepsilon}$  command in compatibility mode. This is to encourage users to move over to using \documentclass as quickly as possible. During the preamble the error does nothing (so that packages can use  $\LaTeX$   $2_{\varepsilon}$  commands) but it is redefined to be an error message at \begin{document}.

```
55 \let\@latex@e@error\@gobble
56 \def\@latex@e@error@#1{%
        \@latexerr{%
57
           LaTeX2e command \string#1\space in LaTeX 2.09 document%
58
59
           This is a LaTeX 2.09 document, but it contains
60
           \string#1.^^J%
61
           If you want to use the new features of LaTeX2e,
62
           your document^^J%
63
           should begin with \string\documentclass\space
64
65
           rather than \string\documentstyle
        }%
66
67 F
```

\@ifdefinable \@old@ifdefinable \@@ifdefinable \@latex@e@commands We trap the \@notdefinable error message to check to see if the command is a  $\LaTeX$  2 $\varepsilon$  command, in which case we allow the definition to happen. We keep a list of commands which are allowed to be redefined this way in \@latex@e@commands, and remove an entry each time it is defined.

```
68 \let\@old@ifdefinable\@ifdefinable
69 \long\def\@ifdefinable#1{%
     70
        \def\@latex@e@commands{##1##2}%
71
72
        ##3% ##3 will either be \iftrue or \iffalse
73
           \expandafter\@firstofone
74
        \else
           \expandafter\@old@ifdefinable\expandafter#1%
75
76
        \fi
77
     }%
78
     \expandafter\@tempa\@latex@e@commands#1\iftrue#1\iffalse#1\@tempa%
79 }
80 \let\@@ifdefinable\@ifdefinable
81 \def\@latex@e@commands{%
     \usepackage\listfiles\ensuremath\LaTeXe\lrbox
82
     \th\dh\ng\dj\TH\DH\NG\DJ\k\r\SS
83
84
     \guillemotleft\guillemotright\guilsinglleft
85
     \guilsinglright\quotedblbase\quotesinglbase
86 }
```

\@begin@tempboxa

If we were to switch off the new \width, \height and \depth commands, this is how to do it. This isn't done, since these commands may be used in packages.

```
\long\def\@begin@tempboxa#1#2{%
  \begingroup
  \setbox\@tempboxa#1{{#2}}}
```

#### 4.4 Document class hook

\@documentclasshook

This macro is called by each use of \documentclass. We define it to define \@normalsize and \normalsize if necessary, to input each unused option as a package, and to switch off the new IATEX  $2\varepsilon$  commands. However, we leave on the commands \settoheight, \settowidth and the new options to \parbox and \minipage, since these are likely to be used in packages.

The intention of the strange \normalsize tests below is that after the \documentstyle command has completed, if neither \normalsize nor \@normalsize was defined by the main style or one of its 'substyles' or 'options', then \@normalsize will be undefined and \normalsize will generate an error saying it hasn't been defined.

If the style defined either \normalsize or normalsize then these two commands will be \let equal to each other, with the definition given by the style file.

If the style defines both  $\mbox{\tt normalsize}$  and  $\mbox{\tt @normalsize}$  then those two definitions are kept.

```
87 \def\@documentclasshook{%
     \RequirePackage\@unusedoptionlist
     \let\@unusedoptionlist\@empty
 89
     \def\@tempa{\@normalsize}%
 90
 91
     \ifx\normalsize\@tempa
       \let\normalsize\@normalsize
 92
 93
 94
     \ifx\@normalsize\@undefined
 95
       \let\@normalsize\normalsize
 96
 97
     \ifx\normalsize\@undefined
 98
        \let\normalsize\original@normalsize
     \fi
 99
     \let\@latex@e@error\@latex@e@error@}
100
Save the original definition of \normalsize (which generates an error)
101 \let\original@normalsize\normalsize
Some styles don't define \normalsize, just \@normalsize.
```

100 \dof\normalgizo\\@normalgizo\

102 \def\normalsize{\@normalsize}

## 4.5 Compatibility with LaTeX 2.09 document styles

\@missingfileerror

\original@normalsize

\normalsize

If a .cls file is missing, we look to see if there is a file of the same name with a .sty extension.

```
103 \@ifundefined{saved@missingfileerror}{
      \let\saved@missingfileerror=\@missingfileerror
105 }{}
106 \def\@missingfileerror#1#2{%
      \ifx#2\@clsextension
107
          \InputIfFileExists{#1.\@pkgextension}{%
108
             \wlog{Compatibility mode: loading #1.\@pkgextension
109
                \space rather than #1.#2.}%
110
111
         }{%
112
             \saved@missingfileerror{#1}{#2}%
         }%
113
      \else
114
         \saved@missingfileerror{#1}{#2}%
115
116
      \fi
117 }
```

\@obsoletefile

For compatibility with the document styles which \input the standard LaTeX 2.09 document styles, we distribute files called article.sty, book.sty, report.sty, slides.sty and letter.sty. These use the command \@obsoletefile, which the LaTeX  $2_{\varepsilon}$  kernel defines to produce a warning message. We redefine it to just produce a message in the log file, and to pass any options from the old filename to the new filename.

```
118 \def\@obsoletefile#1#2{%
119 \expandafter\let\csname opt@#1\expandafter\endcsname
120 \csname opt@\@currname.\@currext\endcsname
```

```
\wlog{Compatibility mode: inputting '#1'
                   121
                             instead of obsolete '#2'.}}
                   122
                   LATEX 2.09 supported these parameters, so for compatibility with old document
      \footheight
                   styles we allocate them.
         \@maxsep
                   123 \newdimen\footheight
      \@dblmaxsep
                   124 \newdimen\@maxsep
                   125 \newdimen\@dblmaxsep
            \mark IATEX 2.09 initialized an empty mark. Who knows, someone may have relied on
                   126 \mark{{}{}}
                   4.6
                         Lavout
                   There is a new version of \sloppy in \LaTeX 2_{\varepsilon}, so we restore the old one.
                   127 \def\sloppy{\tolerance \@M \hfuzz .5\p@ \vfuzz .5\p@}
    \@finalstrut The strut which is used in a footnote has changed. This restores the old definition.
                   128 \def\@finalstrut#1{\unskip\strut}
                   Restore the old spacing around floats.
\@marginparreset
 \@floatboxreset
                   129 \let \@marginparreset \@empty
                   130 \let \@floatboxreset \@empty
        \proclaim From plain TeX.
                   131 \outer\def\proclaim #1. #2\par{%
                   132
                        \medbreak
                        \noindent{\bfseries#1.\enspace}{\slshape#2\par}%
                   133
                        \ifdim\lastskip<\medskipamount
                   134
                          \removelastskip\penalty55\medskip
                   135
                        \fi}
                   136
                  From plain T<sub>F</sub>X.
            \hang
      \textindent
                   137 \def\hang{\hangindent\parindent}
                   138 \def\textindent#1{\indent\llap{#1\enspace}\ignorespaces}
  \ttraggedright
                   \Officetootnotemark IATEX 2\varepsilon version has \nobreak to allow hyphenation.
                   140 \def\@footnotemark{%
                       \leavevmode
                   142 \ifhmode\edef\@x@sf{\the\spacefactor}\fi
                   143 \@makefnmark
                   144
                       \ifhmode\spacefactor\@x@sf\fi
                       \relax}
                   145
                   Fudge this command to remove the text font command which is always the first
\@textsuperscript
                   thing in the argument. This is needed as in compatibility mode footnotes are
                   processed in math mode, but the standard classes call \Otextsuperscript in the
                   definition of \thanks.
                   146 \def\@textsuperscript#1{<math>\mbox{m@th}^{\c} \gobble#1}}
    \@makefnmark \text{LAT}_{FX} 2_{\varepsilon} version uses \textsuperscript rather than math mode.
                   147 \end{ark}\hbox{$^{\0thefnmark}\m0th$}}
                  LATEX 2\varepsilon version has an additional \itshape which would not work (and would
  \thempfootnote
                   not make sense) in math mode.
                   148 \def\thempfootnote{\@alph\c@mpfootnote}
```

\@fnsymbol IATEX version uses \ensuremath which does not work in compatibility mode.

```
149 \def\Ofnsymbol#1{\ifcase#1\or *\or \dagger\or \ddagger\or
```

- 150 \mathchar "278\or \mathchar "27B\or \|\or \*\*\or \dagger\dagger
- 151 \or \ddagger\ddagger \else\@ctrerr\fi}

\@inmathwarn

LATEX (1995/12/01) checks for text commands being used in math mode. We switch this off in compatibility mode.

152 \let\@inmathwarn\@gobble

#### 4.7 Verbatim

\verb

We restore the old definition of \verb, but using \verbatim@font rather than \tt. The use of \bgroup and \egroup allows us to prefix it with \hbox in math mode.

```
153 \def\verb{%
154
                                                            \relax\ifmmode\hbox\fi\bgroup
155
                                                                                           \@noligs
                                                                                           \verbatim@font
156
                                                                                            \let\do\@makeother \dospecials
157
                                                                                           \ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ens
158
159 }
 160 \def\@sverb#1{%
                                                              \def\@tempa ##1#1{\leavevmode\null##1\egroup}%
 161
 162
                                                              \@tempa
 163 }
```

\verbatim@nolig@list

The only ligatures which should be switched off in 2.09 mode are the Spanish punctuation.

164 \def\verbatim@nolig@list{\do\'}

\@lquote

We restore the old definition of \@lquote in case any packages use it.

165 \def\@lquote{\leavevmode{\kern\z@}'}

## 4.8 Character codes

By default, IFTEX  $2\varepsilon$  makes the input charactes 0–8, 11, 14–31 and 128–255 illegal. In compatibility mode, we restore their old meanings.

```
166 \catcode0=9
```

167 \@tempcnta=1

168  $\loop\ifnum\@tempcnta<32$ 

 $169 \qquad \texttt{\catcode} \texttt{\code} = 12$ 

170 \advance\@tempcnta by 1

171 \repeat%

172 \catcode'\^^I=10\relax%

173 \catcode'\^^L=13\relax%

174 \catcode'\^^M=5\relax%

 $175 \catcode127=15$ 

 $176 \ensuremath{\mbox{\ensuremath{\mbox{0}Tempcnta=128}}}$ 

177 \loop\ifnum\@tempcnta<256

178 \catcode\@tempcnta=12

179 \advance\@tempcnta by 1

 $180 \rganium per 180 \rganium per 180$ 

## 4.9 Miscellaneous commands

\SLiTeX The SLITeX logo.

```
181 \DeclareRobustCommand{\SLiTeX}{{%
```

182 \normalfont S\kern -.06em

183 {\scshape 1\kern -.035emi}\kern -.06em

184 \TeX}}

```
\+ The \+ command should be defined, so that it can be used in \renewcommand.
                   185 \let\+\@empty
           \@cla IATFX2.09 (and early versions of IATFX 2\varepsilon) used these count registers in the defi-
                  nition of \cline and \multispan. Declare them here in case they were used for
           \@clb
                  any other purposes.
        \mscount
                  186 \newcount\@cla
                  187 \newcount\@clb
                  188 \newcount\mscount
   \@imakepicbox picture mode version
                   189 \long\def\@imakepicbox(#1,#2)[#3]#4{%
                        \vbox to#2\unitlength
                  190
                         {\let\mb@b\vss \let\mb@l\hss\let\mb@r\hss
                  191
                  192
                          \let\mb@t\vss
                   193
                          \@tfor\reserved@a :=#3\do{%
                   194
                            \if s\reserved@a
                   195
                              \let\mb@l\relax\let\mb@r\relax
                   196
                            \else
                   197
                              \expandafter\let\csname mb@\reserved@a\endcsname\relax
                   198
                            \fi}%
                  199
                          \mb@t
                          \hb@xt@ #1\unitlength{\mb@l #4\mb@r}%
                  200
                  201
                  This kern ensures that a b option aligns on the bottom of the text rather than
                   the baseline. this is the documented behaviour in the LATEXBook. The kern is
                  removed in compatibility mode.
                      Remove kern for bug compatibility with 2.09.
                  202 %
                           \kern\z@
                  203
                           }}
     \supereject
                  204 \def\supereject{\par\penalty-\@MM}
                  This old version might change the vertical spacing when it is used. Some old
        \nofiles
                  document might depend on that changed spacing so...
                  205 \def\nofiles{%
                  206
                       \@fileswfalse
                  207
                        \typeout{No auxiliary output files.^^J}%
                       \long\def\protected@write##1##2##3{}%
                  208
                  209
                       \let\makeindex\relax
                       \let\makeglossary\relax}
                  210
                           Packages and classes
                   4.10
\ProvidesPackage
                  We redefine \ProvidesPackage and \ProvidesClass to produce a log message
                  rather than a warning if they find an unexpected file.
  \ProvidesClass
                  211 \def\ProvidesPackage#1{%
                        \xdef\@gtempa{#1}%
                  212
                        \ifx\@gtempa\@currname\else
                  213
                  214
                          \wlog{Compatibility mode: \@cls@pkg\space'\@currname' requested,
                  215
                             but '#1' provided.}%
                        \fi
                  216
                        \@ifnextchar[\@pr@videpackage{\@pr@videpackage[]}}%]
                  217
                  218 \let\ProvidesClass=\ProvidesPackage
                  That ends the head of latex209.def.
                  219 (/head)
```

## 5 Middle of latex209.def

At this point, the code for oldlfont.sty is read in by the installation script.

## 6 End of latex209.def

This section describes the end of latex209.def.  $220 \ \langle *tail \rangle$ 

#### 6.1 Font commands

```
\ds@oldlfont
                        We declare oldlfont, newlfont, margid and nomargid options to mimic the
                        LATEX 2.09 NESS1 options.
          \ds@newlfont
            \ds@margid
                        221 \def\ds@oldlfont{%
                               \@no@font@optfalse
          \ds@nomargid
                        222
                        223
                               \let\math@bgroup\@empty
                               \let\math@egroup\@empty
                        224
                        225
                               \let\@@math@bgroup\math@bgroup
                        ^{226}
                               \let\@@math@egroup\math@egroup
                        227 }
                        228 \def\ds@newlfont{%
                               \@no@font@optfalse
                        229
                               \OptionNotUsed
                        230
                        231 }
                        232 \def\ds@margid{%
                        233
                              \@no@font@optfalse
                              \let\math@bgroup\bgroup
                        234
                              \def\math@egroup##1{##1\egroup}%
                             \let \@@math@bgroup \math@bgroup
                        236
                        237
                              \let \@@math@egroup \math@egroup
                        238 }
                        239 \let\ds@nomargid\ds@oldlfont
                        240 \@onlypreamble\ds@oldfont
                        241 \@onlypreamble\ds@newfont
                        242 \@onlypreamble\ds@margid
                        243 \@onlypreamble\ds@nomargid
                        The default encoding for old documents is OT1 rather than T1.
      \encodingdefault
                         244 \renewcommand{\encodingdefault}{OT1}
                        Just in case a document style relies on \cmex/m/n/10 to exist (which may have
          \cmex/m/n/10
                        been hard-wired to \fam3) we load the font.
                         245 \expandafter\font\csname cmex/m/n/10\endcsname=cmex10
                        These commands were used in older versions of NFSS.
          \normalshape
         \mediumseries
                        246 \def\normalshape{\fontshape\shapedefault\selectfont}
                         247 \def\mediumseries{\fontseries\seriesdefault\selectfont}
\DeclareOldFontCommand
                        We redefine \DeclareOldFontCommand to do nothing. This means that any new
                        document classes will have their redefinitions of \rm, \bf etc. ignored.
                        248 \def \DeclareOldFontCommand #1#2#3{%
                              \wlog{Compatibility mode: definition
                        250
                                    of \string#1\space ignored.}%
                        251 }
                        Some font-specifying commands from LATEX 2.09.
             \@halfmag
            \@magscale
                        252 \def\@halfmag{ scaled \magstephalf}
             \@ptscale
                        253 \def\@magscale#1{ scaled \magstep#1 }
                        254 \def\@ptscale#1{ scaled #100 }
```

\font The current font is set to be CMR 10pt, to match LATEX 2.09.

```
255 \fontencoding{OT1} \fontfamily{cmr}
256 \fontsize{10}{12} \fontseries{m} \fontshape{n}
257 \selectfont
```

\load The \load command is no longer needed, it is therefore defined to do nothing.

258 \let\load\@gobbletwo

Here are three delimiters which have be partly disabled by NFSS2 (the small variants) since the corresponding fonts are normally not preloaded as math symbol fonts

```
259 \DeclareMathDelimiter{\lgroup} % extensible ( with sharper tips
260 {\mathopen}{bold}{"28}{largesymbols}{"3A}
261 \DeclareMathDelimiter{\rgroup} % extensible ) with sharper tips
262 {\mathclose}{bold}{"29}{largesymbols}{"3B}
263 \DeclareMathDelimiter{\bracevert} % the vertical bar that extends braces
264 {\mathord}{typewriter}{"7C}{largesymbols}{"3E}
```

In old documents we might find some usages of **\bffam** etc. Thus we add the following code:

```
265 \let\bffam\symbold
266 \let\sffam\symsans
267 \let\itfam\symitalic
268 \let\ttfam\symtypewriter
269 \let\scfam\symsmallcaps
270 \let\slfam\symslanted
271 \let\rmfam\symoperators
```

Below are the \..pt commands with hopefully the same functionality as in the old lfonts.tex. Notice that the \baselineskip parameter wasn't set by these commands so that using them now shouldn't set this either. Thus we go low-level. This means that the commands are now fragile but I think they have been fragile before.

```
272 \newcommand\vpt {\edef\f@size{\@vpt}\rm}
273 \newcommand\vipt {\edef\f@size{\@vipt}\rm}
274 \newcommand\viipt {\edef\f@size{\@viipt}\rm}
275 \newcommand\viipt {\edef\f@size{\@viipt}\rm}
276 \newcommand\xpt {\edef\f@size{\@xpt}\rm}
277 \newcommand\xpt {\edef\f@size{\@xpt}\rm}
278 \newcommand\xipt {\edef\f@size{\@xipt}\rm}
279 \newcommand\xipt {\edef\f@size{\@xipt}\rm}
280 \newcommand\xivpt {\edef\f@size{\@xipt}\rm}
281 \newcommand\xvpt {\edef\f@size{\@xvipt}\rm}
282 \newcommand\xxpt {\edef\f@size{\@xxpt}\rm}
283 \newcommand\xxvpt {\edef\f@size{\@xxvpt}\rm}
{\edef\f@size{\@xxvpt}\rm}
```

## 6.2 User customization

For sites which customized their version of LATEX 2.09, we provide a file latex209.cfg, which is loaded every time we enter compatibility mode. If the file doesn't exist, we don't do anything.

```
284 \InputIfFileExists{latex209.cfg}{}} That ends the file latex209.def. 285 \langle/tail\rangle
```

## 7 Obsolete style files

For each of the standard IATEX 2.09 document styles, we produce a file which points to the appropriate IATEX  $2\varepsilon$  document class file. This means that any styles which say \input article.sty should still work.

```
286 (*article | book | report | letter | slides)
287 \NeedsTeXFormat{LaTeX2e}
288 (/article | book | report | letter | slides)
289 (*article)
290 \@obsoletefile{article.cls}{article.sty}
291 \LoadClass{article}
292 (/article)
293 \langle *book \rangle
294 \@obsoletefile{book.cls}{book.sty}
295 \LoadClass{book}
296 (/book)
297 (*report)
298 \@obsoletefile{report.cls}{report.sty}
299 \LoadClass{report}
300 (/report)
301 (*letter)
302 \@obsoletefile{letter.cls}{letter.sty}
303 \LoadClass{letter}
304 (/letter)
305 (*slides)
306 \@obsoletefile{slides.cls}{slides.sty}
307 \LoadClass{slides}
308 (/slides)
We also produce empty fleqn.sty and leqno.sty files in case anyone has \input
one of them.
309 (*flegn)
310 \@obsoletefile{fleqn.clo}{fleqn.sty}
311 \input{fleqn.clo}
312 (/fleqn)
313 (*leqno)
314 \@obsoletefile{leqno.clo}{leqno.sty}
315 \input{leqno.clo}
316 (/leqno)
We also produce an empty openbib.sty in case anyone has \input openbib.sty.
The openbib class option is now part of the kernel.
317 (*openbib)
318 \iffalse
320 The openbib option is now part of LaTeX thus this package is no
321 longer necessary. It is only retained for upward compatibility.
322 See the 2nd edition of the LaTeX book, or the file usrguide.tex
323 which comes with the LaTeX distribution, for more details.
324
325 \fi
326 \langle \text{openbib} \rangle
We also produce an empty bezier.sty in case anyone has \input bezier.sty.
The \bezier command is now part of the kernel.
327 (*bezier)
328 \iffalse
329
330\,\,\mathrm{The}\,\,\backslash\mathrm{bezier} command is now part of LaTeX thus this package is no
331 longer necessary. It is only retained for upward compatibility.
332 Also, please note that LaTeX now offers an extended bezier command
333 which automatically calculates the number of points needed for the
334 plot. See the 2nd edition of the LaTeX book, or the file
335 usrguide.tex which comes with the LaTeX distribution, for more
336 details.
338 \fi
339 (/bezier)
```

We also produce a tlenc package, for compatibility with the Companion. This has been replaced by the fontenc package.

- 340 **(\*t1enc)**
- $341 \verb|\NeedsTeXFormat{LaTeX2e}|$
- 342 \ProvidesPackage{t1enc}[1994/06/01 Standard LaTeX package]
- $343 \ \end{{\tt condingdefault}{T1}}$
- 344 \fontencoding{T1}\selectfont
- $345 \langle /t1enc \rangle$