# The file syntonly.dtx for use with $\LaTeX 2_{\varepsilon}$ .\* It contains the code for syntonly.sty

Frank Mittelbach

Rainer Schöpf

June 14, 2016

This file is maintained by the LATEX Project team. Bug reports can be opened (category latex) at <a href="http://latex-project.org/bugs.html">http://latex-project.org/bugs.html</a>.

This package implements the \syntaxonly declaration for LATEX  $2\varepsilon$ . This command can be used in the preamble for running a document through LATEX without actually getting any output.

## 1 Identification

We identify the package and its current version.

```
1 \langle package \rangle ProvidesPackage \{ syntonly \}
2 \langle *dtx \rangle
3 \ProvidesFile \{ syntonly . dtx \}
4 \langle /dtx \rangle
5 \langle *package | dtx \rangle
6 [1999/09/17 v2.1e Standard LaTeX2e package]
7 \langle /package | dtx \rangle
```

# 2 Implementation

8 (\*package)

\dummyft@ First of all we need to define the 'dummy' font.

9 \font\dummyft@=dummy \relax

Now we can define the 'syntax only' feature. We define a switch \if@syntax so that any macro can always find out if it is really supposed to typeset text. Its default is to run in normal mode.

10 \newif\ifsyntax@

11 \syntax@false

\syntaxonly The \syntaxonly macro sets up everything for syntax checking.

12  $\def\syntaxonly{\%}$ 

<sup>\*</sup>This file has version number v2.1e, dated 1999/09/17.

First of all it sets the syntax@ switch to true.

#### 13 \syntax@true

Then it globally sets all fonts to the dummy font. These are: the current font outside math mode,

#### 14 \global\dummyft@

and the  $3 \times 16$  math fonts for the 16 math groups. We use a loop to set these.

- 15 \count@\sixt@@n
- 16 \loop
- 17 \ifnum\count@ >\z@
- 18 \advance\count@\m@ne
- 19 \global\textfont\count@\dummyft@
- 20 \global\scriptfont\count@\dummyft@
- 21 \global\scriptscriptfont\count@\dummyft@
- 22 \repeat

Since all font changes occur either via \selectfont (in text or \mathversion (for math mode) it is sufficient to change these to no-ops. In addition we must prevent the loading of math fonts, this is done by making \getanddefine@fonts a no-op.

- 23 \global\let\selectfont\relax
- 24 \global\let\mathversion\@gobble
- 25 \global\let\getanddefine@fonts\@gobbletwo

We prevent TEX from complaining about the dummy font having no characters.

26 \tracinglostchars\z@

Then we disable the output routine, and set \frenchspacing (which is slightly faster than \nonfrenchspacing). Finally we set \hbadness to 10000 to avoid overfull box messages.

- 27 \nopages@
- 28 \frenchspacing
- 29 \hbadness\@M}

#### \nopages@

The \nopages@ macro disables the LATEX output routine. To this end we define a very simple output routine that empties the output and footnote boxes (remember that the latter are insertions.

#### 30 \def\nopages@{%

- 31 \output {\setbox\z@\box\@cclv 32 \setbox\z@\box\footins
- 33 \deadcycles\z@}%

Then we protect it against definition by a style file.

#### 34 \newtoks\output

But this is not enough: normally the LATEX output routine is responsible for dealing with floating objects. We therefore also redefine the internal macros for handling floats and marginpars.

#### 35 \def\@xfloat##1[##2]{%

There are a few things that have to be retained: the definition of \@captype since it is used by the \caption command,

### 36 \def\@captype{##1}%

the error message issued when not in outer paragraph mode,

37 \ifinner\@parmoderr\fi

and the \@parboxrestore command for the body of the float. This is necessary since it restores the original definitions of important commands like \par or \\.

38 \setbox\@tempboxa\vbox\bgroup\@parboxrestore}%

\end@float must now only close the brace:

#### 39 \let\end@float\egroup

The above would be enough also for two-column floats with the kernel algorithm. However with the refined algorithm inside fixlxt2e this doesn't any longer work, so there we also need to explicitly overwrite the end macro for two-column floats (the begin is still okay as it resolves to \@xfloat eventually).

#### 40 \let\end@dblfloat\egroup

The redefinition of the \marginpar command is a bit more complicated since we have to check for the optional argument. First we redefine the command itself:

41 \def\marginpar{\ifinner\@parmoderr\fi

We open a group so that everything gathered in a temporary box can easily be thrown away by closing it again (see below).

42 \begingroup \@ifnextchar [\@xmpar\@ympar}

\@xmpar and \@ympar are now defined similar to \@xfloat above. If an optional argument is present \@xmpar typesets it in a temporary box that is thrown away later. Then it calls up \@ympar to process \marginpar's argument.

- 43 \long\def\@xmpar[##1]{%
- 44 \setbox\@tempboxa\vbox{\@parboxrestore ##1}\@ympar}%

\@ympar gathers its argument in the same temporary box and throws away its contents by closing the group opened up in \marginpar above.

- 45 \long\def\@ympar##1{%
- 46 \setbox\@tempboxa\vbox{\@parboxrestore ##1}\endgroup}%

And that's all we had to do.

47 }

#### \@preamblecmds

We disable the use of the \syntaxonly command after \begin{document}

- 48 \@onlypreamble\syntaxonly
- $49~\langle/\mathsf{package}\rangle$