The **EverySel** package*

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Abstract  
This packages provides hooks into the NFSS-command \selectfont called \EverySelectfont and \AtNextSelectfont analogous to \AtBeginDocument.

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1 Introduction

This package provides the hooks \EverySelectfont and \AtNextSelectfont whose arguments are executed just after \LaTeX has loaded a new font using \selectfont (which means that it will be executed after every font loaded via NFSS).

An example application would be a package for setting ragged text which needs to distinguish between monospaced and proportional fonts. Such a package exists: ragged2e[2].

2 Usage

\EverySelectfont \EverySelectfont\{⟨code⟩\} declares ⟨code⟩ that is saved internally and executed just after each \selectfont.

---

*The version number of this file is v1.03, last revised 1999/06/08.
The name EverySel is a tribute to the 8 + 3 file-naming convention of certain “operating systems” and their “file systems”; strictly speaking it should be Every-Selectfont.
Warning: The ⟨code⟩ is saved globally; there is currently no way to remove it.
\AtNextSelectfont\{⟨code⟩\} declares ⟨code⟩ that is saved internally and executed just after and only the next \selectfont.
Repeated use of the commands is permitted: the code in their argument is stored (and executed) in the order of their declarations.
The argument of \AtNextSelectfont is executed after the argument of \EverySelectfont.

3 Options
The package has no options.

4 Required packages
The package requires no further packages.

5 The implementation
\AtBeginDocument
\EverySelectfont\AtEveryHook
First we allocate the hooks
\AtEverySelectfont\AtNextHook
These commands are modeled after \AtBeginDocument.
\EverySelectfont\AtNextSelectfont
The hooks are placed inside \selectfont. Unfortunately for us there are two versions of \selectfont in normal \LaTeX: One is defined in the kernel and the other by the package tracefnt[1]. So we have to check for two versions.
5 THE IMPLEMENTATION

\@EverySelectfont@Init  We do this in the macro \@EverySelectfont@Init, which is executed just after \begin{document} (with the aid of \AtBeginDocument), when we know for sure which version of \selectfont we have to overload.

8 \newcommand*{\@EverySelectfont@Init}{% 
We have to distinguish two cases: tracefnt and no tracefnt.

9 \@ifpackageloaded{tracefnt}{% 
And we have a problem: \selectfont is defined using \DeclareRobustCommand, which really defines \selectfont. So instead of simply using \CheckCommand we also have to use \ expandafter and \csname...\endcsname.

10 \expandafter\CheckCommand\csname selectfont \endcsname{% 
11 \ifx\f@linespread\baselinestretch \else 
12 \set@fontsize\baselinestretch\f@size\f@baselineskip \fi 
13 \xdef\font@name{% 
14 \csname curr@fontshape/\f@size@endcsname\}% 
15 \pickup@font 
16 \font@name 
17 \ifnum \tracingfonts>\tw@ 
18 \@font@info{Switching to \font@name}\fi 
19 \size@update 
20 \enc@update 
21 \% 
22 }% 
23.Now the case without tracefnt.

24 \expandafter\CheckCommand\csname selectfont \endcsname{% 
25 \ifx\f@linespread\baselinestretch \else 
26 \set@fontsize\baselinestretch\f@size\f@baselineskip \fi 
27 \xdef\font@name{% 
28 \csname curr@fontshape/\f@size@endcsname\}% 
29 \pickup@font 
30 \font@name 
31 \size@update 
32 \enc@update 
33 \% 
34 }% 
35 .After the checks we can be sure we have the correct version of \selectfont, so we redefine it with our hooks.

36 \DeclareRobustCommand{\selectfont}{% 
37 \% 
38 \ifx\f@linespread\baselinestretch \else 
39 \set@fontsize\baselinestretch\f@size\f@baselineskip \fi 
40 \xdef\font@name{% 
41 \csname curr@fontshape/\f@size@endcsname\}% 
42 \pickup@font 
43 \font@name 
44 \@EverySelectfont@EveryHook 
45 \@EverySelectfont@AtNextHook 
46 \gdef\@EverySelectfont@AtNextHook{}% 
47 .We have to reset \@EverySelectfont@AtNextHook after each use.
The additions of `tracefnt` to `selectfont` can be implemented using \EverySelectfont.

\@ifpackageloaded{tracefnt}{%
  \EverySelectfont{%
    \ifnum \tracingfonts>	w@
      \@font@info{Switching to \font@name}\fi%
  }%
}\%

Since \@EverySelectfont@Init should only be used once it is self-destructing.

\let\@EverySelectfont@Init\undefined
}

Finally we insert `\EverySelectfont@Init` into \begin{document}.

\AtBeginDocument{\@EverySelectfont@Init}

\langle
\package
\rangle

6 Acknowledgements

David Carlisle provided the solution for my problems with \CheckCommand.

References

CTAN:tex-archive/macros/latex/base/ltfsstrc.dtx.
\LaTeX\ package.

\LaTeX\ package.

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