The obsolete EverySel package*

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Why you should no longer use this package:

This packages provides hooks into the \selectfont command \EverySelectfont and \AtNextSelectfont analogous to \AtBeginDocument. In January 2021 the hook management \TeX provides since autumn 2020 the kernel directly contains these hooks. Information on their usage can be found in the the corresponding documentation for \hooks[1] and look for Hooks provided in NFSS command. We only provide this package to allow backwards compatibility. For current versions of \TeX it’s only mapping the hooks to the original everysel macros. In case you use an older \TeX format, everysel will automatically fallback to its’ old implementation by loading everysel-2011/10/28.sty.

Contents

| 1 Introduction | 1 |
| 2 Usage | 2 |
| 3 Options | 2 |
| 4 Required packages | 2 |
| 5 The Implementation | 2 |
| 5.1 The implementation by Martin Schröder | 2 |
| 5.1.1 Allocations | 3 |
| 5.1.2 The user-visible commands | 3 |
| 5.1.3 Inserting the hooks | 3 |
| 6 Acknowledgements | 5 |

1 Introduction

This package provides the hooks \EverySelectfont and \AtNextSelectfont whose arguments are executed just after \TeX 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[3].

*The version number of this file is v2.1.
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 EverySelectfont.
†maintained by Marei Peischl
2 Usage

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

Warning: The ⟨code⟩ is saved globally; there is currently no way to remove it.

\AtNextSelectfont \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

1 \providecommand\IfFormatAtLeastTF{\@ifl@t@r\fmtversion}
2 \IfFormatAtLeastTF{2021/01/05}{}{\input{everysel-2011-10-28.sty}}
3 \IfFormatAtLeastTF{2021/01/05}{}{\endinput}
4 \newcommand*{\EverySelectfont}[1]{\AddToHook{selectfont}{#1}}
5 \newcommand*{\AtNextSelectfont}[1]{\AddToHookNext{selectfont}{#1}}

Some packages are using the initial hook of everysel internally (see also https://github.com/latex3/latex2e/issues/474). So Version 2.1 provides these macros to ensure compatibility. In case someone is changing the initial hook everysel will now show a warning to inform package authors to switch to lthooks instead. A future release is planned to always trigger this warning.

6 \newcommand*{\@EverySelectfont@Legacy}{\let\@EverySelectfont@Init\undefined}
7 \newcommand*{\@EverySelectfont@Init}{\@EverySelectfont@Legacy}
8 \AddToHook{begindocument}{\expandafter\ifx\@EverySelectfont@Init\@EverySelectfont@Legacy\else
9 \PackageWarningNoLine{everysel}\%

Everysel is no longer required.,\MessageBreak

12 The LaTeX kernel is now providing the same functionality itself.,\MessageBreak

13 See the package documentation or lthooks-doc for further information.
14 )\%
15 \fi
16 \@EverySelectfont@Init
17 }

5.1 The original implementation by Martin Schröder

To provide compatibility for older \TeX formats we wrap the original implementation of everysel version 1.2 into the fallback package everyshi-2011-01-10.
5 THE IMPLEMENTATION

5.1.1 Allocations

First we allocate the hooks
\@EverySelectfont@EveryHook  The code to be executed just after the normal \selectfont.
18 \newcommand{\@EverySelectfont@EveryHook}{}
\@EverySelectfont@AtNextHook  The code to be executed just after the normal \selectfont and \@EverySelectfont@EveryHook.
19 \newcommand{\@EverySelectfont@AtNextHook}{}

5.1.2 The user-visible commands

\EverySelectfont, \AtNextSelectfont  These commands are modeled after \AtBeginDocument.
20 \newcommand*{\EverySelectfont}[1]{\g@addto@macro\@EverySelectfont@EveryHook{#1}}
21 \newcommand*{\AtNextSelectfont}[1]{\g@addto@macro\@EverySelectfont@AtNextHook{#1}}

5.1.3 Inserting the hooks

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[2]. The CJK also redefines \selectfont.
So we have to check for three versions.
\@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.
24 \newcommand*{\@EverySelectfont@Init}{% 25 \message{ABD: EverySelectfont initializing macros}%
26 \@ifpackageloaded{tracefnt}{% And we have a problem: \selectfont is defined using \DeclareRobustCommand, which really defines \selectfont/un. So instead of simply using \CheckCommand we also have to use \expandafter and \csname...
27 \expandafter\CheckCommand\csname selectfont \endcsname{% 28 \ifexf{f@linespread}{baselinestretch} {else 29 \set@fontsize{baselinestretch}{f@size}{f@baselineskip}{f}{
30 \xdef{font@name}{% 31 \csname\curr@fontshape/f@size\endcsname}% 32 \pickup@font
33 \font@name
34 \ifnum\tracingfonts>\tw@ 35 \@font@info{Switching to \font@name}\fi
36 \size@update
37 \enc@update
38 }% 39 }%
The case with CJK
\@ifpackageloaded{CJK}\{% 
\expandafter\CheckCommand\csname selectfont \endcsname\%
\ifx\f@linespread\baselinestretch \else
 \set@fontsize\baselinestretch\f@size\f@baselineskip \fi
 \xdef\font@name{\csname\curr@fontshape/\f@size\endcsname}\%
 \pickup@font
 \font@name
 \expandafter\ifx\csname CJK\curr@fontshape\endcsname \relax \else
 \CJK@bold@false \csname CJK\curr@fontshape\endcsname \fi
 \size@update \enc@update\%
\}\%
Now the default (no \tracefnt and no CJK).
\expandafter\CheckCommand\csname selectfont \endcsname\%
\ifx\f@linespread\baselinestretch \else
 \set@fontsize\baselinestretch\f@size\f@baselineskip \fi
 \xdef\font@name{\csname\curr@fontshape/\f@size\endcsname}\%
 \pickup@font
 \font@name
 \size@update \enc@update
\}%
\}%
After the checks we can be sure we have the correct version of \selectfont, so we redefine it with our hooks.
\DeclareRobustCommand{\selectfont}{
\ifx\f@linespread\baselinestretch \else
 \set@fontsize\baselinestretch\f@size\f@baselineskip \fi
 \xdef\font@name{\csname\curr@fontshape/\f@size\endcsname}\%
 \pickup@font
 \font@name
 \size@update \enc@update\%
\}%
\}%
We have to reset \EverySelectfont@AtNextHook after each use.
\gdef\EverySelectfont@AtNextHook{}\%
\size@update \enc@update \%
The additions of \tracefnt to \selectfont can be implemented using \EverySelectfont.
\ifpackageloaded{tracefnt}\{%
\EverySelectfont\%
6 ACKNOWLEDGEMENTS

6.1 Acknowledgements

David Carlisle provided the solution for my problems with \CheckCommand. Thanks to the \LaTeX-Project-Team for creating solutions which made this an obsolete package. Special thanks to Ulrike Fischer to keep the maintainer up to date.

References


Change History

| Version | Description               | Change
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<tbody>
<tr>
<td>v1.00</td>
<td>General: New</td>
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<td>v1.01</td>
<td>General: Fixed use of \newline in title.</td>
<td>1</td>
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<td>v1.02</td>
<td>General: Minor documentation enhancements</td>
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<td>v1.03</td>
<td>General: Moved to LPPL</td>
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<td>\texttt{\textbackslash EverySelectfont\textbackslash Init}: Check for CJK. 4, 5</td>
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<td>General: Emulate everysel if the kernel is new enough. 2</td>
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