

# The obsolete `EverySel` package<sup>\*</sup>

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## Why you should no longer use this package:

This packages provides hooks into the NFSS-command `\selectfont` called `\EverySelectfont` and `\AtNextSelectfont` analogous to `\AtBeginDocument`. In January 2021 the hook management L<sup>A</sup>T<sub>E</sub>X provides since autumn 2020 the kernel directly contains these hooks. Information on their usage can be found in the the corresponding documentation for `Ihooks[1]` and look for Hooks provided in NFSS command. We only provide this package to allow backwards compatibility. For current versions of L<sup>A</sup>T<sub>E</sub>X it's only mapping the hooks to the original `everysel` macros. In case you use an older L<sup>A</sup>T<sub>E</sub>X format, `everysel` will automatically fallback to its' old implementation by loading `everysel-2011/10/28.sty`.

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## 1 Introduction

This package provides the hooks `\EverySelectfont` and `\AtNextSelectfont` whose arguments are executed just after L<sup>A</sup>T<sub>E</sub>X 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]`.

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<sup>\*</sup>The version umber 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`.

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## 2 Usage

\EverySelectfont \EverySelectfont{\langle code\rangle} 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{\langle code\rangle} 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 \providetcommand\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 intial 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 intial 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}{%
9 \expandafter\ifx\@EverySelectfont@Init\@EverySelectfont@Legacy\else
10 \PackageWarningNoLine{everysel}{%
11 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 L<sup>A</sup>T<sub>E</sub>X formats we wrap the original implementation of `everysel` version 1.2 into the fallback package `everyshi-2011-01-10`.

### 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 These commands are modeled after \AtBeginDocument.  
\AtNextSelectfont 20 \newcommand\*{\EverySelectfont}[1]  
21 {\g@addto@macro\@EverySelectfont@EveryHook{#1}}  
22 \newcommand\*{\AtNextSelectfont}[1]  
23 {\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 L<sup>A</sup>T<sub>E</sub>X: 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}%

We have to distinguish three cases: tracefnt, CJK and everything else.

26 \@ifpackageloaded{tracefnt}{}%

And we have a problem: \selectfont is defined using \DeclareRobustCommand, which really defines \selectfont<sub>L</sub>. So instead of simply using \CheckCommand we also have to use \expandafter and \csname... \endcsname.

```
27 \expandafter\CheckCommand\csname selectfont \endcsname{}%
28 \ifx\f@linespread\baselinestretch \else
29   \set@fontsize\baselinestretch\f@size\f@baselineskip \fi
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

```

40      \@ifpackageloaded{CJK}{%
41          \expandafter\CheckCommand\csname selectfont \endcsname{%
42              \ifx\f@linespread\baselinestretch \else
43                  \set@fontsize\baselinestretch\f@size\f@baselineskip \fi
44                  \xdef\font@name{%
45                      \csname\curr@fontshape/\f@size\endcsname}%
46                  \pickup@font
47                  \font@name
48                  \expandafter\ifx\csname CJK@\curr@fontshape\endcsname \relax
49                  \else
50                      \CJK@bold@false
51                      \csname CJK@\curr@fontshape\endcsname
52                  \fi
53                  \size@update
54                  \enc@update}%
55          }{%

```

Now the default (no tracefnt and no CJK).

```

56      \expandafter\CheckCommand\csname selectfont \endcsname{%
57          \ifx\f@linespread\baselinestretch \else
58              \set@fontsize\baselinestretch\f@size\f@baselineskip \fi
59              \xdef\font@name{%
60                  \csname\curr@fontshape/\f@size\endcsname}%
61                  \pickup@font
62                  \font@name
63                  \size@update
64                  \enc@update
65              }%
66          }%
67      }%

```

After the checks we can be sure we have the correct version of `\selectfont`, so we redefine it with our hooks.

```

68      \DeclareRobustCommand{\selectfont}{%
69          {%
70              \ifx\f@linespread\baselinestretch \else
71                  \set@fontsize\baselinestretch\f@size\f@baselineskip \fi
72                  \xdef\font@name{%
73                      \csname\curr@fontshape/\f@size\endcsname}%
74                  \pickup@font
75                  \font@name
76                  \EverySelectfont@EveryHook
77                  \EverySelectfont@AtNextHook

```

We have to reset `\EverySelectfont@AtNextHook` after each use.

```

78          \gdef\EverySelectfont@AtNextHook{}%
79          \size@update
80          \enc@update
81      }%

```

The additions of `tracefnt` to `\selectfont` can be implemented using `\EverySelectfont`.

```

82      \@ifpackageloaded{tracefnt}{%
83          \EverySelectfont{%

```

```

84      \ifnum \tracingfonts>\tw@%
85          \@font@info{Switching to \font@name}\fi}%
86      }{}%
87      \@ifpackageloaded{CJK}{%
88          \EverySelectfont{%
89              \expandafter\ifx\csname CJK@\curr@fontshape\endcsname \relax
90              \else
91                  \CJK@bold@false
92                  \csname CJK@\curr@fontshape\endcsname
93                  \fi}%
94      }{}%
95      \let\@EverySelectfont@Init\undefined
96  }
Finally we insert \EverySelectfont@Init into \begin{document}.
97 \AtBeginDocument{\@EverySelectfont@Init}

```

## 6 Acknowledgements

David Carlisle provided the solution for my problems with `\CheckCommand`. Thanks to the L<sup>A</sup>T<sub>E</sub>X-Project-Team for creating solutions which made this an obsolete package. Special thanks to Ulrike Fischer to keep the maintainer up to date.

## References

- [1] Frank Mittelbach. The `ltshipout` package.  
<http://mirrors.ctan.org/macros/latex/base/lthooks-doc.pdf>
- [2] Frank Mittelbach and Rainer Schöpf. The `tracefnt` package for use with the new font selection scheme.  
<http://mirrors.ctan.org/macros/latex/base/ltfssstrc.dtx>. L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> package.
- [3] Martin Schröder. The `ragged2e` package. <http://mirrors.ctan.org/macros/latex/contrib/supported/ms/ragged2e.dtx>. L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> package.

## Change History

v1.00 General: New ..... 1 v1.01 General: Fixed use of <code>\newline</code> in title. ..... 1	v1.02 General: Minor documentation enhancements ..... 1 v1.03 General: Moved to LPPL ..... 1
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v1.1	General: New address, LPPL 1.3 . . . 1	v2.0	General: Emulate everysel if the kernel is new enough. . . . . 2
v1.2	\@EverySelectfont@Init: Check for CJK. . . . . 4, 5		Information on new kernel methods . . . . . 1