

# The latex-lab-testphase-new-or-2 code

Frank Mittelbach, L<sup>A</sup>T<sub>E</sub>X Project

v0.86d 2025-05-10

## Abstract

This code implements changes to the output routine intended to be moved in the L<sup>A</sup>T<sub>E</sub>X kernel at some point in the future.

## 1 Introduction

## 2 The Implementation

1 `\package`

### 2.1 File declaration

```
2 \ProvidesPackage{latex-lab-testphase-new-or-2}
3     [\lftlabneworIIdate\space v\lftlabneworIIversion\space
4     Changes to the output routine]
```

### 2.2 \@makecol reimplementaion

`footnote-floats` (*plug*) If `\DocumentMetadata` is used we use `footnotes-floats` as the default. In 2e compatibility mode this should be changed to `footnotes-floats-legacy`.

```
5 \AssignSocketPlug {build/column/outputbox}{footnotes-floats}
```

```
\@makecol@handlesplitfootnotes This is only an early draft and doesn't do much. Contains incomplete preparation for
\@makecol@splitfootnotemessagehook tagging commented out.
```

*TODO: Interfaces and code will change in the future*

```
6 \def\@makecol@handlesplitfootnotes {%
7 % \ifx\splitfootnote@continuation\@empty \else
8 % \setbox\footins\vbox{\splitfootnote@continuation\unvbox\footins}%
9 % \global\let\splitfootnote@continuation\@empty
10 % \fi
11 \ifnum\insertpenalties>\z@
12 \@makecol@splitfootnotemessagehook
13 % \setbox\footins\vbox{\unvbox\footins --- END at split}%
14 % \gdef\splitfootnote@continuation {--- START after split}%
15 \fi
16 }
17 \def\splitfootnote@continuation{}
```

This could issue warning if split footnotes are encountered.

```
18 \let \@makecol@splitfootnotemessagehook \@empty
    (End of definition for \@makecol@handlesplitfootnotes and \@makecol@splitfootnotemessagehook.)
```

### 2.3 \@outputpage reimplementaion

We still have to deal with various plug setting for tagging: This needs documentation and moving.

default (*plug*)

```
19 \ExplSyntaxOn
    TODO: where should these plug declarations go? tagpdf?
20 \NewTaggingSocketPlug{build/page/header}{default}
21   {
22     \__tag_hook_kernel_before_head:
23     #2
24     \__tag_hook_kernel_after_head:
25   }
26 \AssignTaggingSocketPlug{build/page/header}{default}
```

default (*plug*)

```
27 \NewTaggingSocketPlug{build/page/footer}{default}
28   {
29     \__tag_hook_kernel_before_foot:
30     #2
31     \__tag_hook_kernel_after_foot:
32   }
33 \AssignTaggingSocketPlug{build/page/footer}{default}
```

default (*plug*)

```
34 \NewTaggingSocketPlug{build/column/outputbox}{default}
35   {
36     \__tag_check_typeout_v:n { ==>~In~\token_to_str:N \@makecol
37                               \c_space_tl\the\c@page }
38     \tag_mc_add_missing_to_stream:Nn \@outputbox {main}
39   }
```

default (*plug*)

```
40 \NewTaggingSocketPlug{build/column/footins}{default}
41   { \tag_mc_add_missing_to_stream:Nn \footins {footnote} }
```

The two sockets do nothing (default noop) if we are in lua mode. If not they get the default assigned

```

42 \sys_if_engine_luatex:F
43   {
44     \AssignTaggingSocketPlug{build/column/outputbox}{default}
45     \AssignTaggingSocketPlug{build/column/footins}{default}
46   }
47 \ExplSyntaxOff

```

### 3 Replacement for the footmisc package

The replacement for footmisc. If the new code is used, we must replace the package if it is loaded by the user:

```

48 \declare@file@substitution{footmisc.sty}{latex-lab-footmisc.ltx}

```

This can be removed the moment the remaining hooks and sockets have been integrated into footmisc, which will probably not happen before the 2025/11 release.

### 4 Temp stuff that is related but should go to the kernel

This is the code from latex-lab-footnotes.dtx.

```

49 \input{latex-lab-footnotes.ltx}
50 </package>

```

## Index

The italic numbers denote the pages where the corresponding entry is described, numbers underlined point to the definition, all others indicate the places where it is used.

<b>A</b>	footnotes-floats-legacy (plug) . . . . .	<i>1</i>
\AssignSocketPlug . . . . .		<i>5</i>
\AssignTaggingSocketPlug . . . . .		<i>26, 33, 44, 45</i>
<b>D</b>	<b>G</b>	
\def . . . . .	\gdef . . . . .	<i>14</i>
default (plug) . . . . .	\global . . . . .	<i>9</i>
\DocumentMetadata . . . . .	<b>I</b>	
	\ifnum . . . . .	<i>11</i>
<b>E</b>	\ifx . . . . .	<i>7</i>
\else . . . . .	\input . . . . .	<i>49</i>
\ExplSyntaxOff . . . . .	\insertpenalties . . . . .	<i>11</i>
\ExplSyntaxOn . . . . .	<b>L</b>	
	\let . . . . .	<i>9, 18</i>
<b>F</b>	\tlabneworIIDate . . . . .	<i>3</i>
\fi . . . . .	\tlabneworIIversion . . . . .	<i>3</i>
\footins . . . . .	<b>N</b>	
footnote-floats (plug) . . . . .	\NewTaggingSocketPlug . . . . .	<i>20, 27, 34, 40</i>
footnotes-floats (plug) . . . . .	noop (plug) . . . . .	<i>2</i>

<b>P</b>		<b>T<sub>E</sub>X and L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> commands:</b>	
Plugs:		<code>\@empty</code>	7, 9, 18
<code>default</code>	2, 19, 27, 34, 40	<code>\@makecol</code>	1, 36
<code>footnote-floats</code>	5	<code>\@makecol@handlesplitfootnotes</code>	6
<code>footnotes-floats</code>	1	<code>\@makecol@splitfootnotemessagehook</code>	6
<code>footnotes-floats-legacy</code>	1	.....	6
<code>noop</code>	2	<code>\@outputbox</code>	38
<code>\ProvidesPackage</code>	2	<code>\@outputpage</code>	2
		<code>\c@page</code>	37
<b>S</b>		<code>\declare@file@substitution</code>	48
<code>\setbox</code>	8, 13	<code>\splitfootnote@continuation</code>	7, 8, 9, 14, 17
<code>\space</code>	3	.....	7, 8, 9, 14, 17
sys commands:		<code>\z@</code>	11
<code>\sys_if_engine_luatex:TF</code>	42	<code>\the</code>	37
<b>T</b>		tl commands:	
tag commands:		<code>\c_space_tl</code>	37
<code>\tag_mc_add_missing_to_stream:Nn</code>	38, 41	token commands:	
.....	38, 41	<code>\token_to_str:N</code>	36
tag internal commands:		<b>U</b>	
<code>__tag_check_typeout_v:n</code>	36	<code>\unvbox</code>	8, 13
<code>__tag_hook_kernel_after_foot:</code>	31	<b>V</b>	
<code>__tag_hook_kernel_after_head:</code>	24	<code>\vbox</code>	8, 13
<code>__tag_hook_kernel_before_foot:</code>	29		
<code>__tag_hook_kernel_before_head:</code>	22		