

# 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 `[\ltxlabneworIIdate\space v\ltxlabneworIIversion\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 reimplementation

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>G</b>	
<b>D</b>		\gdef . . . . .	<i>14</i>
\def . . . . .	<i>6, 17</i>	\global . . . . .	<i>9</i>
default (plug) . . . . .	<i>2, 19, 27, 34, 40</i>	<b>I</b>	
\DocumentMetadata . . . . .	<i>1</i>	\ifnum . . . . .	<i>11</i>
<b>E</b>		\ifx . . . . .	<i>7</i>
\else . . . . .	<i>7</i>	\input . . . . .	<i>49</i>
\ExplSyntaxOff . . . . .	<i>47</i>	\insertpenalties . . . . .	<i>11</i>
\ExplSyntaxOn . . . . .	<i>19</i>	<b>L</b>	
<b>F</b>		\let . . . . .	<i>9, 18</i>
\fi . . . . .	<i>10, 15</i>	\ltnlabneworIIdate . . . . .	<i>3</i>
\footins . . . . .	<i>8, 13, 41</i>	\ltnlabneworIIversion . . . . .	<i>3</i>
footnote-floats (plug) . . . . .	<i>5</i>	<b>N</b>	
footnotes-floats (plug) . . . . .	<i>1</i>	\NewTaggingSocketPlug . . . . .	<i>20, 27, 34, 40</i>
		noop (plug) . . . . .	<i>2</i>

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