

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

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

v0.86d 2026-01-16

## 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     [\ltnlabneworIIdate\space v\ltnlabneworIIversion\space  
4     Changes to the output routine]
```

### 2.2 \@makecol reimplementation

`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`  
`\@makecol@splitfootnotemessagehook`

This is only an early draft and doesn't do much. Contains incomplete preparation for 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>	<b>\insertpenalties</b> . . . . . 11
<b>\AssignSocketPlug</b> . . . . . 5	
<b>\AssignTaggingSocketPlug</b> . . 26, 33, 44, 45	<b>L</b>
<b>D</b>	<b>\let</b> . . . . . 9, 18
<b>\def</b> . . . . . 6, 17	<b>\ltnlabneworIIdate</b> . . . . . 3
<b>default (plug)</b> . . . . . 2, 19, 27, 34, 40	<b>\ltnlabneworIIversion</b> . . . . . 3
<b>\DocumentMetadata</b> . . . . . 1	<b>N</b>
<b>E</b>	<b>\NewTaggingSocketPlug</b> . . . . 20, 27, 34, 40
<b>\else</b> . . . . . 7	<b>noop (plug)</b> . . . . . 2
<b>\ExplSyntaxOff</b> . . . . . 47	<b>P</b>
<b>\ExplSyntaxOn</b> . . . . . 19	<b>Plugs:</b>
<b>F</b>	<b>default</b> . . . . . 2, 19, 27, 34, 40
<b>\fi</b> . . . . . 10, 15	<b>footnote-floats</b> . . . . . 5
<b>\footins</b> . . . . . 8, 13, 41	<b>footnotes-floats</b> . . . . . 1
<b>footnote-floats (plug)</b> . . . . . 5	<b>footnotes-floats-legacy</b> . . . . . 1
<b>footnotes-floats (plug)</b> . . . . . 1	<b>noop</b> . . . . . 2
<b>footnotes-floats-legacy (plug)</b> . . . . . 1	<b>\ProvidesPackage</b> . . . . . 2
<b>G</b>	<b>S</b>
<b>\gdef</b> . . . . . 14	<b>\setbox</b> . . . . . 8, 13
<b>\global</b> . . . . . 9	<b>\space</b> . . . . . 3
<b>I</b>	<b>sys commands:</b>
<b>\ifnum</b> . . . . . 11	<b>\sys_if_engine luatex:TF</b> . . . . . 42
<b>\ifx</b> . . . . . 7	<b>T</b>
<b>\input</b> . . . . . 49	<b>tag commands:</b>
	<b>\tag_mc_add_missing_to_stream:Nn</b>
	. . . . . 38, 41

