

# Temporary output patches for tagging and better link support

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## 1 Introduction

This package contains a few patches of internal L<sup>A</sup>T<sub>E</sub>X needed to support paragraph tagging across page boundaries (in pdfT<sub>E</sub>X) and improve the behaviour of links across page breaks.

Until this get properly integrated with the kernel code this has to be taken as a prototype and code, interfaces as well as behavior may change without notice and certainly without any backwards compatibility!

## 2 The Implementation

```
1 <*package>
2 \ProvidesPackage{output-patches-tmp-ltx}
3     [2021-08-20 v0.95 Temporary patches of output commands]
4 \RequirePackage{etoolbox}
```

### 2.1 Patching the OR

This add hooks around header and footer. At first initialize the hooks

```
5 \newcommand\@kernel@before@head{}
6 \newcommand\@kernel@before@foot{}
7 \newcommand\@kernel@after@head{}
8 \newcommand\@kernel@after@foot{}
9 \newcommand\@kernel@before@footins{}
10 \newcommand\@kernel@before@cclv{}
11 \newcommand\@mult@ptagging@hook{}
12
13 \patchcmd\@outputpage
14   {\vfil\color@hbox\normalcolor\hb@xt@\textwidth{\@thehead}\color@endbox}
15   {\vfil\@kernel@before@head\color@hbox\normalcolor\hb@xt@\textwidth{\@thehead}\color@endbox\@kernel@after@head}
16   {\typeout{Patching header in \string\@outputpage}}{\PATCHerror }
17
18
19 \patchcmd\@outputpage
20   {\color@hbox\normalcolor\hb@xt@\textwidth{\@thehead}\color@endbox}
21   {\@kernel@before@foot\color@hbox\normalcolor\hb@xt@\textwidth{\@thehead}\color@endbox\@kernel@after@foot}
22   {\typeout{Patching footer in \string\@outputpage}}{\PATCHerror }
```

`\@makecol` We have to patch `\@makecol` in two places:

- update 255 up front to add missing tmb/tme if necessary
- update the `\footins` stream if that one got split

```
23
24 \patchcmd\@makecol
25   {\vskip\skip\footins}
26   {\vskip\skip\footins\@kernel@before@footins}
27   {\typeout{Patching \string\@makecol\space for tagging}}{\PATCHerror }
28
29 % for some reason patching with etoolbox only works in this order ...
30
31 \pretocmd\@makecol{\@kernel@before@cclv}
32   {\typeout{Patching \string\@makecol\space for tagging}}{\PATCHerror }
```

*(End definition for \@makecol. This function is documented on page ??.)*

## 2.2 multicol adjustments

The patches for `pkgmulticol` are fairly minimal:

- At the start of the environment anything already on the page is picked up and stored in `\partial@page`, we may need to add a TMB to that (it should have a proper TME). This has to happen in the “main” stream context.

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```
33 \AddToHook{package/after/multicol}{% multicol needs later loading
34   \patchcmd\page@sofar
35     {\setbox\z@\hbox{p}\global\dimen\tw@dp\z@}%
36     {%
37       \setbox\z@\hbox{p}\global\dimen\tw@dp\z@
38       \@mult@ptagging@hook
39     }%
40     {\typeout{Patching \string\page@sofar\space for tagging}}{\PATCHerror}%
41 }
```

## 2.3 Interrupt hooks

This requires the `l3pdfannot` module! We add the code here and not in `hyperref`, as it should also work with links created directly with the `l3pdfannot` commands. The file is only loaded by the `pdfmanagement`, so no need to test if the commands exist.

```
42 \ExplSyntaxOn
43 \def\@kernel@before@head{\pdfannot_link_off:}
44 \def\@kernel@before@foot{\pdfannot_link_off:}
45 \def\@kernel@after@head {\pdfannot_link_on:}
46 \def\@kernel@after@foot {\pdfannot_link_on:}
47 \ExplSyntaxOff
48 \endinput
49 </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>R</b>	
<code>\AddToHook</code> .....	33	<code>\RequirePackage</code> .....	4
<b>D</b>		<b>S</b>	
<code>\def</code> .....	43, 44, 45, 46	<code>\setbox</code> .....	35, 37
<code>\dimen</code> .....	35, 37	<code>\skip</code> .....	25, 26
<code>\dp</code> .....	35, 37	<code>\space</code> .....	27, 32, 40
		<code>\string</code> .....	16, 22, 27, 32, 40
<b>E</b>		<b>T</b>	
<code>\endinput</code> .....	48	TeX and L <sup>A</sup> T <sub>E</sub> X 2 <sub>ε</sub> commands:	
<code>\ExplSyntaxOff</code> .....	47	<code>\@kernel@after@foot</code> .....	8, 21, 46
<code>\ExplSyntaxOn</code> .....	42	<code>\@kernel@after@head</code> .....	7, 15, 45
<b>F</b>		<code>\@kernel@before@cclv</code> .....	10, 31
<code>\footins</code> .....	2, 25, 26	<code>\@kernel@before@foot</code> .....	6, 21, 44
		<code>\@kernel@before@footins</code> .....	9, 26
<b>G</b>		<code>\@kernel@before@head</code> .....	5, 15, 43
<code>\global</code> .....	35, 37	<code>\@makecol</code> .....	2, 23
		<code>\@mult@ptagging@hook</code> .....	11, 38
<b>H</b>		<code>\@outputpage</code> .....	13, 16, 19, 22
<code>\hbox</code> .....	35, 37	<code>\@thefoot</code> .....	20, 21
		<code>\@thehead</code> .....	14, 15
<b>N</b>		<code>\color@endbox</code> .....	14, 15, 20, 21
<code>\newcommand</code> .....	5, 6, 7, 8, 9, 10, 11	<code>\color@hbox</code> .....	14, 15, 20, 21
<code>\normalcolor</code> .....	14, 15, 20, 21	<code>\hb@xt@</code> .....	14, 15, 20, 21
<b>P</b>		<code>\page@sofar</code> .....	34, 40
<code>\patchcmd</code> .....	13, 19, 24, 34	<code>\partial@page</code> .....	2
<code>\PATCHerror</code> .....	16, 22, 27, 32, 40	<code>\tw@</code> .....	35, 37
pdfannot commands:		<code>\z@</code> .....	35, 37
<code>\pdfannot_link_off:</code> .....	43, 44	<code>\textwidth</code> .....	14, 15, 20, 21
<code>\pdfannot_link_on:</code> .....	45, 46	<code>\typeout</code> .....	16, 22, 27, 32, 40
<code>\pretocmd</code> .....	31		
<code>\ProvidesPackage</code> .....	2	<b>V</b>	
		<code>\vfil</code> .....	14, 15
		<code>\vskip</code> .....	25, 26