

Temporary output patches for tagging and better link support

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1 Introduction

This file contains a few patches of internal L^AT_EX commands to support paragraph tagging across page boundaries (in pdfT_EX) 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 (*code)
2 \ProvidesPackage{latex-lab-testphase-new-or-1}
3     [2022-11-94 v0.1a Temporary output patches for tagging and better link support]
4 \RequirePackage{etoolbox}
```

2.1 Patching the OR

This adds hooks around header and footer, in \@makecol and in multicol. At first initialize some of the hooks. We use providecommand to avoid problems if the kernel changes here and provides them directly.

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

We patch `\@makecol`, if new-or-2 is loaded too it will overwrite that again.

```

21 \providecommand\@kernel@before@footins{}
22 \providecommand\@kernel@before@cclv{}
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.

```

33 \AddToHook{package/multicol/after}
34   {% multicol needs later loading
35
36   \patchcmd\page@sofar
37     {\global\dimen\tw@\dp\z@}%
38     {\global\dimen\tw@\dp\z@
39     \@mult@ptagging@hook
40     }%
41     {\typeout{Patching \string\page@sofar\space for tagging}}{\PATCHError}%
42 }

```

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.

```

43 \ExplSyntaxOn
44 \def\@kernel@before@head{\pdfannot_link_off:}
45 \def\@kernel@before@foot{\pdfannot_link_off:}
46 \def\@kernel@after@head {\pdfannot_link_on:}
47 \def\@kernel@after@foot {\pdfannot_link_on:}
48 \ExplSyntaxOff

```

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.

| | | | |
|----------------------------------|-----------------------|---|--------------------|
| A | | S | |
| <code>\AddToHook</code> | 33 | <code>\skip</code> | 25, 26 |
| D | | <code>\space</code> | 27, 32, 41 |
| <code>\def</code> | 44, 45, 46, 47 | <code>\string</code> | 14, 20, 27, 32, 41 |
| <code>\dimen</code> | 36, 38 | T | |
| <code>\dp</code> | 36, 38 | T _E X and L ^A T _E X 2 _ε commands: | |
| E | | <code>\@kernel@after@foot</code> | 8, 19, 47 |
| <code>\ExplSyntaxOff</code> | 48 | <code>\@kernel@after@head</code> | 7, 13, 46 |
| <code>\ExplSyntaxOn</code> | 43 | <code>\@kernel@before@ccclv</code> | 22, 31 |
| F | | <code>\@kernel@before@foot</code> | 6, 19, 45 |
| <code>\footins</code> | 2, 25, 26 | <code>\@kernel@before@footins</code> | 21, 26 |
| G | | <code>\@kernel@before@head</code> | 5, 13, 44 |
| <code>\global</code> | 36, 38 | <code>\@makecol</code> | 1, 2, 21 |
| N | | <code>\@mult@ptagging@hook</code> | 9, 39 |
| <code>\normalcolor</code> | 12, 13, 18, 19 | <code>\@outputpage</code> | 11, 14, 17, 20 |
| P | | <code>\@thefoot</code> | 18, 19 |
| <code>\patchcmd</code> | 11, 17, 24, 35 | <code>\@thehead</code> | 12, 13 |
| <code>\PATCHerror</code> | 14, 20, 27, 32, 41 | <code>\color@endbox</code> | 12, 13, 18, 19 |
| pdfannot commands: | | <code>\color@hbox</code> | 12, 13, 18, 19 |
| <code>\pdfannot_link_off:</code> | 44, 45 | <code>\hb@xt@</code> | 12, 13, 18, 19 |
| <code>\pdfannot_link_on:</code> | 46, 47 | <code>\page@sofar</code> | 35, 41 |
| <code>\pretocmd</code> | 31 | <code>\partial@page</code> | 2 |
| <code>\providecommand</code> | 5, 6, 7, 8, 9, 21, 22 | <code>\tw@</code> | 36, 38 |
| <code>\ProvidesPackage</code> | 2 | <code>\z@</code> | 36, 38 |
| R | | <code>\textwidth</code> | 12, 13, 18, 19 |
| <code>\RequirePackage</code> | 4 | <code>\typeout</code> | 14, 20, 27, 32, 41 |
| | | V | |
| | | <code>\vfil</code> | 12, 13 |
| | | <code>\vskip</code> | 25, 26 |