# Package plautopatch v0.9m

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2020/11/26

Japanese pIATEX/upIATEX formats and packages often conflict with other IATEX packages which are unaware of pIATEX/upIATEX. In the worst case, such packages throw a fatal error or end up with a wrong output.

The goal of this package plautopatch is that there should be no need to worry about such incompatibilities, because specific patches are loaded automatically whenever necessary. This helps not only to simplify source files, but also to make the appearance of working plateX/uplateX sources similar to those of ordinary LateX ones.

The package is maintained on GitHub:

https://github.com/aminophen/plautopatch

### Requirements

If LATEX  $2_{\varepsilon}$  2020-10-01 or newer is running, this package uses the new hook system such as \AddToHook{package/before/...} and \AddToHook{package/after/...}. If LATEX  $2_{\varepsilon}$  is older than that, this package depends on filehook package (written by Martin Scharrer).

#### Usage

Load this package at the very beginning of the LATEX source. It is strongly recommended to use \RequirePackage{plautopatch} before \documentclass or any other commands, as such other classes and packages may load some problematic packages internally.

Here is an example:

```
%\RequirePackage{plautopatch}
\documentclass{tarticle}% vertical writing (requires plext)
\usepackage{array}% incompatible with plext
\begin{document}
...
\end{document}
```

In the above example, the class tarticle internally requires the package plext. However, array explicitly required by \usepackage conflicts with plext. By using \RequirePackage{plautopatch}, plextarray is automatically loaded and the problem goes. The list of automatically-loaded packages is shown at \end{document}:

When multiple packages are loaded, they are all printed as a list separated by commas and spaces.

## List of currently available patches

The legend:

<original package> (<bundle name of original package>)
 <patch package> (<bundle name of patch package>)

Current version (2020/11/26 v0.9m) supports the followings:

- doc (latex)
  - $\rightarrow$  pldocverb (platex-tools)
- tracefnt (latex)
  - $\rightarrow \, \mathsf{ptrace}/\mathsf{uptrace} \,\, (\mathsf{platex}/\mathsf{uplatex})$
- fltrace (latex)
  - $\rightarrow$  pfltrace (platex)
- array (latex-tools)
  - $\rightarrow$  plarray (platex-tools)
- array (latex-tools) + plext (platex)
  - $\rightarrow$  plextarray (platex-tools)
- delarray (latex-tools) + plext (platex)
  - $\rightarrow$  plextdelarray (platex-tools)
- colortbl + plext (platex)
  - → plextcolortbl (platex-tools)
- arvdshln
  - $\rightarrow$  plarydshln (maintained here!)
- arydshln + plext (platex)
  - → plextarydshln (maintained here!)
- siunitx
  - → plsiunitx (maintained here!)
- collcell
  - $\rightarrow$  plcollcell (maintained here!)
- everysel (ms)
  - $\rightarrow \mathsf{pxeverysel} \; (\mathsf{platex}\text{-}\mathsf{tools})$
- everyshi (ms)
  - → pxeveryshi (platex-tools)
- atbegshi (oberdiek)
  - → pxatbegshi (platex-tools)
- ftnright (latex-tools)
  - $\rightarrow$  pxftnright (platex-tools)
- multicol (latex-tools)
  - $\rightarrow \mathsf{pxmulticol} \; (\mathsf{platex}\text{-}\mathsf{tools})$
- xspace (latex-tools)
  - $\rightarrow$  pxxspace (platex-tools)
- textpos
  - $\rightarrow \mathsf{pxtextpos}\ (\mathsf{gentombow})$
- eso-pic
  - $\to \mathsf{pxesopic} \; (\mathsf{gentombow})$
- pdfpages
  - $\rightarrow$  pxpdfpages (gentombow)
- stfloats (sttools)
  - $\rightarrow$  pxstfloats (pxsttools)
- hyperref
  - → pxjahyper (by Takayuki YATO)

- pgfrcs (pgf)
   → pxpgfrcs (maintained here!)
   pgfcore (pgf)
- → pxpgfmark (by Takayuki YATO)

Note that, of course, the list may be adjusted (addition, deletion or replacement) in the future to get the expected result. Feel free to report some compatibility issue or request changes!

## Disabling a specific patch

By default, <patch package> is automatically loaded when <original package> is detected, following the whole list. However, there is still a possibility of another regression issue. In that case, you can disable the detection of <original package> by using the command:

\plautopatchdisable{<original package>}

If you want to disable multiple packages, you can give a comma-separated list of them:

\plautopatchdisable{<original package 1>,<original package 2>}

### Change History

- $\bullet$  2018/08/21 v0.2 First CTAN release
- 2018/08/22 v0.3 Improve detection of problematic packages
- 2018/09/21 v0.5 Add support for colortbl and pgf
- 2018/10/02 v0.6 Add support for arydshln
- 2018/10/27 v0.8 Better support for everysel
- 2018/11/03 v0.9 Add support for siunitx
- 2018/11/25 v0.9b Add support for multicol and doc
- 2019/06/06 v0.9c Update patch for siunitx
- 2019/09/05 v0.9d Add support for xspace and stfloats
- $\bullet$  2020/02/25 v0.9e Add support for textpos
- 2020/05/05 v0.9f Add support for collcell
- 2020/05/25 v0.9g Automatically load pxjahyper
- 2020/09/13 v0.9h No dependency for filehook on LATEX  $2\varepsilon$  2020-10-01
- 2020/09/25 v0.9i Do not require pxeveryshi and pxatbegshi
- 2020/09/27 v0.9j Add support for eso-pic (IATEX  $2_{\varepsilon}$  2020-10-01 required)
- 2020/10/14 v0.9k Move tombow-related patches to gentombow
- 2020/10/21 v0.91 Bug fix for plautopatchdisable
- $\bullet~2020/11/26~v0.9m$  Adapt to latest  $\mathsf{pgf}$