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

The goal of this package \texttt{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 \TeX/\up\TeX sources similar to those of ordinary \LaTeX ones.

The package is maintained on GitHub:

https://github.com/aminophen/plautopatch

Requirements

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

Usage

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

Here is an example:

\begin{verbatim}
\RequirePackage{plautopatch}
\documentclass[tarticle]% vertical writing (requires plex)
\usepackage{array}% incompatible with plex
\begin{document}
...  
\end{document}
\end{verbatim}

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

\begin{verbatim}
***** List of packages loaded by `plautopatch``: *****
plexarray.
******************************************************************************
\end{verbatim}

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 (2021/05/15 v0.9o) supports the followings:

- `doc (latex)`
  → `pldocverb (platex-tools)`
- `tracefnt (latex)`
  → `ptrace/uptrace (platex/uplatex)`
- `filtrace (latex)`
  → `plfiltrace (platex)`
- `array (latex-tools)`
  → `plarray (platex-tools)`
- `array (latex-tools) + plex (platex)`
  → `plexarray (platex-tools)`
- `delarray (latex-tools) + plex (platex)`
  → `plexdelarray (platex-tools)`
- `colortbl + plex (platex)`
  → `plextcolortbl (platex-tools)`
- `arydshln`
  → `plarydshln (maintained here!)`
- `arydshln + plex (platex)`
  → `plextarydshln (maintained here!)`
- `siunitx`
  → `plsiunitx (maintained here!)`
- `collcell`
  → `plcollcell (maintained here!)`
- `everysel (ms)`
  → `pxeverysel (platex-tools)`
- `everyshi (ms)`
  → `pxeveryshi (platex-tools)`
- `atbegshi (oberdiek)`
  → `pxatbegshi (platex-tools)`
- `ftnright (latex-tools)`
  → `pxftnright (platex-tools)`
- `multicol (latex-tools)`
  → `pxmulticol (platex-tools)`
- `xspace (latex-tools)`
  → `pxxspace (platex-tools)`
- `textpos`
  → `pxtextpos (gentombow)`
- `eso-pic`
  → `pxesopic (gentombow)`
- `pdfpages`
  → `pxpdfpages (gentombow)`
- `stfloats (sttools)`
  → `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}

Package-specific notice

• If you use the hyperref package, the patch package pxjahyper is loaded immediately after hyperref.
  If you need some explicit options of pxjahyper (though it should be rare enough because it works
  almost perfectly without those), you should write \PassOptionsToPackage{...}{pxjahyper}
  before hyperref to avoid an option clash.

Change History

• 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 colorbl and pgf
• 2018/10/02 v0.6 Add support for arydshln
• 2018/10/27 v0.8 Better support for everyset
• 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
• 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{} 2ε 2020-10-01
• 2020/09/25 v0.9i Do not require pxeveryshi and pxatbegshi on \LaTeX{} 2ε 2020-10-01
• 2020/09/27 v0.9j Add support for eso-pic (\LaTeX{} 2ε 2020-10-01 required)
• 2020/10/14 v0.9k Move tombow-related patches to gentombow
• 2020/10/21 v0.9l Bug fix for \plautopatchdisable
• 2020/11/26 v0.9m Adapt to latest pgf
• 2021/02/13 v0.9n Do not require pxeverysel on \LaTeX{} 2ε 2021-05-01
• 2021/05/15 v0.9o Do not delay pxjahyper loading