The flippdf package*

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Abstract

The pdfflip package extends pdfLaTeX and LuaLaTeX making it possible to typeset a "mirrored" version of the document. This is sometimes required by publishers who use photographic printing processes that need "camera-ready" documents to be printable on transparent films, so that one reads the pages correctly by looking *through* the film with the *unprinted* side of the film towards his eyes. This package requires everypage by the same author and works exclusively with pdfLaTeX and LuaLaTeX in PDF output mode.

1 Introduction

This LaTeX package makes it possible to typeset a document flipping its pages horizontally. This is sometimes required by publishers who use photographic printing process that need "camera-ready" documents to be printable on transparent films, so that one reads the pages correctly by looking *through* the film (i.e., with the *unprinted* side of the film towards his eyes).

It is also possible to activate the mirroring capability on a page by page basis.

This package requires everypage by the same author and works exclusively with pdfLaTeX and LuaLaTeX in PDF output mode.

2 User interface

By default, once loaded as:

```
\usepackage{pdfflip}
```

the pdfflip becomes immediately *active* (i.e., starts flipping horizontally every page). Conversely, by selecting the off option as in

```
\usepackage[off]{pdfflip}
```

The package is loaded but remains inactive.

`\FlipPDF` The `\FlipPDF` command lets one switch on page flipping. Conversely, `\UnFlipPDF` `\UnFlipPDF` switches off page flipping.

*This file (`flippdf.dtx`) has version number 2.0b, last revised 2020/10/27.

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3 Examples

3.1 Plain case

In this example, every page of the document is flipped, relying on the automatic operation mode of the package.

```
\documentclass[a4paper]{article}
\usepackage{flippdf}
\usepackage{lipsum}

\title{Test document for the flippdf package}

\begin{document}
\maketitle
\lipsum[1-5]
\end{document}
```

3.2 Case with activation and deactivation

In this example, the page flipping is manually activated and deactivated.

```
\documentclass[a4paper]{article}
\usepackage[off]{flippdf}
\usepackage{lipsum}

\title{Test document for the flippdf package}

\begin{document}

\thispagestyle{empty}
{\Large Some non-mirrored initial info}

\bigskip

\lipsum[1]

\maketitle
\setcounter{page}{1}
\FlipPDF
\lipsum[2-6]

\clearpage
\UnFlipPDF
\thispagestyle{empty}
{\Large Some non-mirrored final info}

\bigskip

\lipsum[7]
\end{document}
```

4 Package redesign

Until Fall 2020, flippdf relied on package everypage for its operation. Recently, functionalities similar to those offered by everypage have been incorporated into LaTeX and everypage has been deprecated, maintaining support for it just in view of compatibility for legacy packages still relying on it. As a consequence, flippdf has been redesigned to take advantage of the new LaTeX features and to drop the dependence on everypage.

Version 2.0 of flippdf is the result of the redesign. Version 1.x remains availabe las flippdf-1x and modern flippdf knows how to fallback on it when used on a LaTeX format missing the new features.

5 Implementation

5.1 Implementation of flippdf

Announce the name and version of the package, that requires LaTeX 2ε (actually pdfLaTeX or LuaLaTeX).

```
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{flippdf}%
  [2020/10/27 R2.0b Horizontal flipping of pages with pdfLaTeX]
```

Depending on the actual functionalities provided by LaTeX consider loading flippdf-1x. If so doing, warn about this, and hand over the operation to that package.

```
\@ifundefined{AddToHook}{%
  \PackageWarningNoLine{flippdf}{%
    You appear to be running a version of LaTeX\MessageBreak
    unsupported by current flippdf.\MessageBreak
    Forcing fallback to ‘flippdf-1x‘ that\MessageBreak
    uses an older code base}%
  \RequirePackageWithOptions{flippdf-1x}%
  \endinput}{}
```

State package requirements, including iftex

```
\RequirePackage{iftex}
```

Error out if not working in PDF mode

```
\AtBeginDocument{%
  \ifpdf
    \relax
  \else
    \PackageError{flippdf}{%
      package only works in pdf output mode.}%
  \fi}
```

`\if@sc@flippdf` Define a boolean variable to remember if pages are to be flipped or not.

```
\newif\if@sc@flippdf
```

`\FlipPDF` `\UnFlipPDF` Define the commands used to switch on and off the horizontal flipping of the document pages.

```
\newcommand\FlipPDF{\@sc@flippdftrue}
\newcommand\UnFlipPDF{\@sc@flippdffalse}
```

By default activate the flipping:

```
\FlipPDF
```

Set up the processing of options:

```
\DeclareOption{off}{\UnFlipPDF}
\ProcessOptions
```

And eventually, tell LaTeX to flip every page, by using the everypage hook. First consider the case when running in pdfLaTeX

```
\ifpdftex
  \AddToHook{shipout/background}{%
    \if@sc@flippdf
      \pdfliteral direct {-1 0 0 1 \strip@pt\paperwidth\space 0 cm}%
    \fi}%
\fi
```

Then consider the case when running in LuaLaTeX

```
\ifluatex
  \AddToHook{shipout/background}{%
    \if@sc@flippdf
    \pdfextension literal direct {%
      -1 0 0 1 \strip@pt\paperwidth\space 0 cm}%
    \fi}%
\fi
```

5.2 Implementation of flippdf-1x

Announce the name and version of the package, that requires LaTeX 2_ε (actually pdfLaTeX or LuaLaTeX).

```
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{flippdf-1x}%
  [2020/10/17 1.1 Horizontal flipping of pages with pdfLaTeX]
```

Assure that the dependence on everypage is satisfied.

```
\RequirePackage{everypage}[2007/06/20]
```

Depend on iftex and error out if not working in PDF mode

```
\RequirePackage{iftex}
\AtBeginDocument{%
  \ifpdf
    \relax
  \else
    \PackageError{flippdf}{%
      package only works in pdf output mode}%
  \fi}
```

`\if@sc@flippdf` Define a boolean variable to remember if pages are to be flipped or not.

```
\newif\if@sc@flippdf
```

\FlipPDF
\UnFlipPDF

Define the commands used to switch on and off the horizontal flipping of the document pages.

```
\newcommand\FlipPDF{\@sc@flippdftrue}
\newcommand\UnFlipPDF{\@sc@flippdffalse}
```

By default activate the flipping:

```
\FlipPDF
```

Set up the processing of options:

```
\DeclareOption{off}{\UnFlipPDF}
\ProcessOptions
```

And eventually, tell LaTeX to flip every page, by using the everypage hook. First consider the case when running in pdfLaTeX

```
\ifpdftex
  \AddEverypageHook{%
    \if@sc@flippdf
      \pdfliteral direct {-1 0 0 1 \strip@pt\paperwidth\space 0 cm}%
    \fi}%
\fi
```

Then consider the case when running in LuaLaTeX

```
\ifluatex
  \AddEverypageHook{%
    \if@sc@flippdf
    \pdfextension literal direct {%
      -1 0 0 1 \strip@pt\paperwidth\space 0 cm}%
    \fi}%
\fi
```

Change History

Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

Symbols