

The pdf14 L^AT_EX package

Manuel Pégourié-Gonnard <mpg@elzevir.fr>

2010/03/26 v0.1

Abstract

Starting with T_EX Live 2010, the various formats that directly generate PDF default to PDF 1.5. While this allows for more compact documents thanks to objects compression, it can also lead to compatibility issues with some older PDF viewers.¹ This package changes back the version of generated PDF to 1.4 with formats based on pdfT_EX or LuaT_EX in PDF mode, for documents that need to achieve maximal compatibility with old viewers.

If you need to generate maximally compatible documents, you may also be interested in the pdfx package.

1 Documentation

Just load this package, preferably right after the `\documentclass` command. That's it. The rest of this documentation describes possible problems that may arise under particular circumstances.

The pdf14 package should be loaded as early as possible in order to avoid problems. If you run into an error like:

```
! pdfTeX error (setup): \pdfminorversion cannot be changed after data is
written to the PDF file.
```

it probably means that some package loaded before pdf14 did write data to the PDF file. In case the document class is (indirectly) doing it, you'll need to load pdf14 even before the `\documentclass` command, using `\RequirePackage{pdf14}` as the first line of your source file.

Also, another package might try to set the PDF version itself, likely because it is going to use some advanced PDF features. Currently, no check for this is done by pdf14 to guard against this. So, it is your responsibility to check that the document produced are actually PDF 1.4.² Future versions of pdf14 may include such a check, but it could only guarantee that the *declared* PDF version has not been changed, not that the file produced is actually correct PDF 1.4.³

2 Implementation

```
1 (*package)
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{pdf14}[2010/03/26 v0.1 Generate PDF 1.4 documents (mpg)]
```

¹For reference, Adobe Reader 6.0, released in 2003, was the first reader to handle PDF 1.5.

²You may do so using `pdfinfo` from the Xpdf distribution, or the File→Properties menu of Acrobat Reader.

³Unfortunately, some packages are known to use features available only in PDF 1.5 and greater without properly setting the declared PDF version.

Check if we are running pdfTeX or LuaTeX in PDF mode. If not, issue an information message and exit. Since we address only L^AT_EX-based formats in T_EX Live, we can assume that `\pdfoutput` is available. (We don't load `ifpdf` in order to avoid loading too many packages before `\documentclass`.)

```
4 \begingroup
5 \def\x{%
6   \PackageInfo{pdf14}{%
7     You are not running pdfTeX (or LuaTeX) in PDF mode.\MessageBreak
8     Package pdf14 is useless in this case. Skipping.}%
9   \endinput}
10 \expandafter\ifx\csname pdfoutput\endcsname\relax \else
11   \ifnum\pdfoutput<1 \else
12     \def\x{%
13       \fi
14     \fi
15   \expandafter\endgroup
16 \x
```

Actually set the values if the corresponding primitives are available.

```
17 \begingroup\expandafter\expandafter\expandafter\endgroup
18 \expandafter\ifx\csname pdfminorversion\endcsname\relax \else
19   \pdfminorversion4\relax
20 \fi
21 \begingroup\expandafter\expandafter\expandafter\endgroup
22 \expandafter\ifx\csname pdfobjcompresslevel\endcsname\relax \else
23   \pdfobjcompresslevel0\relax
24 \fi
25 </package>
```

3 Test

Minimal L^AT_EX file actually producing some output, just to check that the package loads correctly, and that the produced file is actually PDF 1.4 (see the Makefile).

```
26 (*testfile)
27 \documentclass{minimal}
28 \usepackage{pdf14}
29 \begin{document}
30 Bla.
31 \end{document}
32 </testfile>
```