

Package testing in the T_EX world (rough proposal)

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BachoT_EX, April 2016

THE PROBLEM

- package authors **should** check packages before upload, but...
- interaction with other packages might break
- incomplete uploads
- ...

A PROPOSAL

- reuse reproducible build approach
- define test files for packages:
 - loading of package with options
 - simple type setting
- provide reference PDFs for the test files:
 - without time stamps, arbitrarily changing stuff
 - possible due to recent changes in engines
- for each upload make **binary** comparison of reference files with test compiles

THE PROBLEM

Generated PDF files contain information like:

/Producer (pdfTeX-1.40.17)

/Creator (TeX)

/CreationDate (D:20160430172833+09'00')

/ModDate (D:20160430172833+09'00')

/Trapped /False

/PTEX.Fullbanner (This is pdfTeX, Version 3.14159265-2.6-1.40

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Consequence

Repeated builds will not be comparable

EXAMPLES: THE SIMPLEST CASE

```
% key = value  
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\documentclass{memoir}  
\begin{document}  
Hello World  
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- `key = value` allows changing some settings, like used engine or additional program runs (not settled)
- the files are compiled by prefixing the code with

```
\pdfinfoitdate=1
\pdftrailerid{}
\pdfsuppressptexinfo=1
\pdfinfo{/Producer (pdfTeX)}
```

(new primitives in TL2016)

WHAT NEEDS TO BE DONE

- format of the test files' header settled
- automated testing system
- test files for some package - hopefully package authors will pick up the idea and provide test files
- get more engines to support these kind of features (in particular XeTeX and luaTeX)

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Thanks for any feedback and suggestion