## The counttexruns package\*

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#### Abstract

The counttexruns package counts how often a I-TEX document is compiled.

Fork me on GitHub: https://github.com/ypid/latex-packages/tree/master/counttexruns

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### 1 Introduction

From a statistical perspective you maybe want to know how often you compiled a document. This is exactly the task I wrote this package for. For a few years I used a bash script and -shell-escape but now I decided to write this small package to do the trick a little nicer.

## 2 Usage

Just load the package placing

\usepackage{counttexruns}

<sup>\*</sup>This document corresponds to counttexruns v1.00, dated 2012/08/27.

in the preamble of your LATEX  $2\varepsilon$  source file.

The counter will be stored in a file with the same prefix as your document (\jobname) but with the file extension ".ctr". You can change the default extension by setting it as package option like this:

\usepackage[extension=ctr]{counttexruns}

\thecounttexruns

To print the count you can use the macro \thecounttexruns. You can also use and even change the LATEX counter "counttexruns". This will not disturb counttexruns.

By the way this documentation was 31 times compiled during development You can use the package ifthen for checking if a counter is one: time\ifthenelse{\equal{\value{counttexruns}}{1}}{s}

### 3 Implementation

\thecounttexruns

First a new counter and file handle is declared. The \newcounter will also declare the macro \thecounttexruns.

- 1 \newcounter{counttexruns}
- 2 \newwrite\@counttexrunsfile

Then the package options are processed.

- 3 \RequirePackage{kvoptions}
- 4 \DeclareStringOption[ctr]{extension}
- 5 \ProcessLocalKeyvalOptions\*

Here it is checked if the file already exists and if that is the case the number of compile events will be stored in the LATEX counter "counttexruns".

- 6 \IfFileExists{\jobname.\counttexruns@extension}{
- 7 \immediate\openin\@counttexrunsfile=\jobname.\counttexruns@extension
- 8 \immediate\read\@counttexrunsfile to \counttexruns
- 9 \immediate\read\@counttexrunsfile to \counttexruns
- 10 \immediate\closeout\@counttexrunsfile
- 11 \setcounter{counttexruns}{\counttexruns}
- 12 }{} %% \value{counttexruns} is still zero

Here the counter countexrunsis increment by one.

13 \stepcounter{counttexruns}

At this point the new count is written back to the file.

- 15 \catcode'\%=11\relax
- 16 \immediate\write\@counttexrunsfile{%% This file
- 17 '\jobname.\counttexruns@extension' was generated by the package counttexruns}
- 18 \catcode'\=14\relax
- 19 \immediate\write\@counttexrunsfile{\arabic{counttexruns}}
- 20 \immediate\closeout\@counttexrunsfile

Well, thats is ...

21 \endinput

# Change History

1.00 General: Initial version  $\dots 1$ 

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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.

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\% 15, 18	\jobname $6, 7, 14, 17$	\read 8, 9
C	N	S \stepcounter 13
\catcode 15, 18	\newwrite 2	<b></b>
\closeout $10, 20$		T
\counttexruns 8, 9, 11	О	\thecounttexruns . $\underline{1}$ , 2
\counttexruns@extension	\openin 7	${f w}$
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