

# The count $\TeX$ runs package\*

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## Abstract

The count $\TeX$ runs package counts how often a  $\LaTeX$  document is compiled.

Location on CTAN: <http://www.ctan.org/pkg/counttexruns>

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

## Contents

<b>Abstract</b>	<b>1</b>
<b>1 Introduction</b>	<b>1</b>
<b>2 Usage</b>	<b>1</b>
<b>3 Implementation</b>	<b>2</b>

## 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 to do this but I decided to write this small package to do the trick a little nicer.

## 2 Usage

Just load the package placing

```
\usepackage{counttexruns}
```

---

\*This document corresponds to count $\TeX$ runs v1.00a, dated 2012/08/31.

in the preamble of your  $\text{\LaTeX} 2_{\epsilon}$  source file.

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

```
\usepackage[extension=ctr]{counttexruns}
```

$\backslash\text{thecounttexruns}$  To print the count you can use the macro  $\backslash\text{thecounttexruns}$ . You can also use and even change the  $\text{\LaTeX}$  counter “counttexruns”. This will not disturb  $\text{count}\text{\TeX}runs$ .

By the way this documentation was 86 times compiled during development.

You can use the package  $\text{ifthen}$  for checking if a counter is one:

```
time\ifthenelse{\equal{\value{counttexruns}}{1}}{s}
```

### 3 Implementation

$\backslash\text{thecounttexruns}$  First a new counter and file handle is declared. The  $\backslash\text{newcounter}$  will also declare the macro  $\backslash\text{thecounttexruns}$ .

```
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  $\text{\LaTeX}$  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\closein\@counttexrunsfile
11 \setcounter{counttexruns}{\@counttexruns}
12 }{}
```

Here the counter “counttexruns” is increment by one.

```
13 \stepcounter{counttexruns}
```

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

```
14 \immediate\openout\@counttexrunsfile=\jobname.\counttexruns@extension
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, that is ...

```
21 \endinput
```

## Change History

1.00	1.00a
General: Initial version . . . . .	General: Minor details fixed . . . . .
1	1

## 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.

<b>Symbols</b>	<b>\counttexruns@extension</b>	<b>R</b>
<code>\%</code> . . . . .	. . . . .	<code>\read</code> . . . . .
<code>\@counttexruns</code> .		8, 9
<code>\@counttexrunsfile</code> .	<b>J</b>	<b>S</b>
. . . . .	<code>\jobname</code> . . .	<code>\stepcounter</code> . . . . .
2, 7, 8,	6, 7, 14, 17	13
9, 10, 14, 16, 19, 20	<b>N</b>	<b>T</b>
<b>C</b>	<code>\newwrite</code> . . . . .	<code>\thecounttexruns</code> . .
<code>\catcode</code> . . . . .	2	1, <u>1</u>
<code>\closein</code> . . . . .	<b>O</b>	<b>W</b>
<code>\closeout</code> . . . . .	<code>\openin</code> . . . . .	<code>\write</code> . . . . .
10	. . . . .	16, 19
20	<code>\openout</code> . . . . .	
	7	
	14	