The countTEXruns package*

Robin Schneider
ypid23@aol.de

June 23, 2013

Abstract

The countTEXruns package counts how often a LaTeX document is compiled.
Information site on CTAN: http://www.ctan.org/pkg/counttexruns
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 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 countTEXruns v1.00a, dated 2012/08/31.

in the preamble of your LaTeX 2_ε 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 12 times compiled during development.

You can use the package ifthen for checking if a counter is one:

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

2.1 latexmk

If you are using latexmk then you have to add this

```
$hash_calc_ignore_pattern{'ctr'} = '^\d+$';
```

to your latexmkrc file to let latexmk know that the changing counter in this file should not trigger a recompile.

3 Implementation

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

```
\newcounter{counttexruns}
\newwrite\@counttexrunsfile
```

Then the package options are processed.

```
\RequirePackage{kvoptions}
\DeclareStringOption[ctr]{extension}
\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".

```
\IfFileExists{\jobname.\counttexruns@extension}{
  \immediate\openin\@counttexrunsfile=\jobname.\counttexruns@extension
  \immediate\read\@counttexrunsfile to \@counttexruns
  \immediate\read\@counttexrunsfile to \@counttexruns
  \immediate\closein\@counttexrunsfile
  \setcounter{counttexruns}{\@counttexruns}
}{}
```

Here the counter "counttexruns" is increment by one.

```
\stepcounter{counttexruns}
```

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

```
\immediate\openout\@counttexrunsfile=\jobname.\counttexruns@extension
\catcode`\%=11\relax
\immediate\write\@counttexrunsfile{%% This file
  '\jobname.\counttexruns@extension' was generated by the package counttexruns.}
\catcode`\%=14\relax
\immediate\write\@counttexrunsfile{\arabic{counttexruns}}
\immediate\closeout\@counttexrunsfile
```

Well, thats is ...

```
\endinput
```

Change History

1.00

General: Initial version 1

1.00a

General: Minor details fixed 1

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