

pagecont: Page numbering continuation between documents

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1 Introduction

The package `pagecont` implements the functionality that several documents can be typeset independently with page numbers in sequence, like if they were a single document.

2 Usage

- Ensure that all files run without errors.
- In the first document call the package with option ‘`first`’.

```
\usepackage[first]{pagecont}
```

- In other documents, just call the package.

```
\usepackage{pagecont}
```

- Run as many times as needed every document, but in the sequence of documents; that is, run (as many times needed) the first document, then run (as many times needed) the second, and so on.

At every run, the output files are produced normally, but the first page of the second document is 1 plus the last page of the previous one, and so on.

3 Idea of implementation

At the end of documents, a file (default is ‘pagecont.pco’) is saved with the current file information plus last file last page. If the filename saved is the same, uses the last file last page. If it is not the same, then you are compiling another file, so the last page saved plus 1 is to be used as new first page.

If the file saved does not exist, then no page is set, like if this document is the first one.

4 User options

first The document that uses the option **first** does not set pages. It is safer to use this option, because afterwards one starts again to process the documents from the beginning, and if the file where the info is saved exists, the page numbering will continue from the number saved in the last run.

savefile=*filename* With option ‘**savefile=*filename***’ you can override the default save file, which is `pagecont.pco`.

5 Code

Identification of the package.

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{pagecont}%
3 [2009/05/26 v1 Page numbering continuation between documents]
```

Using package keyval.

```
4 \RequirePackage{keyval}
```

first Declaring option **first**, which sets a switch when executed.

```
5 \newif\ifPGC@first
6 \PGC@firstfalse
7 \DeclareOption{first}{\PGC@firsttrue}
```

savefile=*filename* Declaring option **savefile=*filename***, using the keyval package.

```
8 \newcommand{\PGC@savefile}{pagecont.pco}
9 \define@key{PGC@}{savefile}{\renewcommand{\PGC@savefile}{#1}}
10 \newcommand{\PGC@kvsetkeys}[1]{\setkeys{PGC@}{#1}}
11 \DeclareOption*{\expandafter\PGC@kvsetkeys\expandafter{\CurrentOption}}
```

Processing options.

```
12 \ProcessOptions
```

\PGC@info The macro **\PGC@info**, which is the content of the file **\PGC@savefile**, has 3 args. The first is the jobname of the file that saved the file. When called (at package call), it compares the saved jobname and the actual **\jobname**. If they are the same, then we should use the last page of last document (with different jobname). This last page is the second arg of **\PGC@info**. If the jobnames are

different, the last page of last run, the third arg of `\PGC@info`, is used as new start for counter `page`.

`\PGC@lastfilelastpage` The second argument of `\PGC@info` is saved in the macro `\PGC@lastfilelastpage`, which is originally set to be 0. This macro will be used when saving the file, at `\end{document}` time.

```
13 \newcommand{\PGC@lastfilelastpage}{0}
14 \newcommand{\PGC@info}[3]{%
```

The primitive `\jobname` outputs chars with catcode 12 (other), so it is needed a hack using `\meaning` to compare the two strings. See <http://www.tex.ac.uk/cgi-bin/texfaq2html?label=compjobnam>.

```
15 \edef\PGC@jobname{\jobname}%
16 \def\PGC@jobnamesaved{#1}%
17 \edef\PGC@jobnamesaved{\expandafter\strip@prefix\meaning\PGC@jobnamesaved}%
18 \ifx\PGC@jobname\PGC@jobnamesaved
19   \renewcommand{\PGC@lastfilelastpage}{#2}%
20   \setcounter{page}{#2}%
21 \else
22   \renewcommand{\PGC@lastfilelastpage}{#3}%
23   \setcounter{page}{#3}%
24 \fi
```

Increments counter `page` to be the number after the last page of last document.

```
25 \addtocounter{page}{1}}
```

`\PGC@savefile` Now the macro for saving information into file `\PGC@savefile`. The macro `\PGC@saveinfo` writes to file with filename `\PGC@savefile` the line

```
\PGC@info{jobname}{lastfile-lastpage}{lastpage}
```

where *jobname*, *lastfile-lastpage* and *lastpage* are the full expansions of `\jobname`, `\PGC@lastfilelastpage` and `\arabic{page}`, respectively.

```
26 \newcommand{\PGC@saveinfo}{%
27   \newwrite\PGC@file
28   \expandafter\openout\expandafter\PGC@file\PGC@savefile\relax
29   \write\PGC@file
30   {\string\PGC@info{\jobname}{\PGC@lastfilelastpage}{\arabic{page}}}}
```

At `\end{document}`, save all to file, by the `\PGC@saveinfo` macro.

```
31 \AtEndDocument{\PGC@saveinfo}
```

Finally, starts action by including file '`\PGC@savefile`', when file is not marked as first of the series.

```
32 \ifPGC@first
33 \else
34   \IfFileExists{\PGC@savefile}{\input{\PGC@savefile}}{}
35 \fi
```

End of file.

```
36 \endinput
```