

# The `pagesel` package

“Selecting shipout output pages”

1999/04/13, v1.1

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## Abstract

With this package single pages or page areas can be selected for output.

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## 1 Usage

The package `pagesel` is a L<sup>A</sup>T<sub>E</sub>X 2 <sub>$\varepsilon$</sub>  package:

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`\usepackage[<options>]{pagesel}`

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(For plain T<sub>E</sub>X and L<sup>A</sup>T<sub>E</sub>X 2.09 the similar package `selectp`<sup>2</sup> from Donald Arsenau<sup>3</sup> can be used.)

Depending on the options the package works in two modes:

1. If no page selecting option is present, so the package ignores the other options and finishes itself. So no page will be suppressed by the package and auxiliary files will be written.
2. With at least one page selecting option the specified pages are selected and the other are suppressed. The default for this mode is that auxiliary will not be overwritten. (This can be changed by an option.)

## 1.1 Page selecting

The package `pagesel` sets up a new counter that is incremented by each `\shipout`. In this way the package counts the output pages regardless the value of the page counter. So each page can individually be addressed, even if there are several pages with the same page number.

### 1.1.1 Options for selecting pages

**odd:** The output pages must have an odd number. All even output pages are suppressed. If there are no page areas specified so all odd pages are print. With page areas only the odd pages in this areas are selected.

**even:** The opposite of option `odd`.

**Page area:** A page area consists of three elements: the starting output page number, an “area” hyphen, and the output page number of the last page in this area. Each component is optional, so there are four kinds to specify a page area:

- $\langle m \rangle - \langle n \rangle$ : All pages between  $\langle m \rangle$  and  $\langle n \rangle$  inclusive.
- $- \langle n \rangle$ : All pages until  $\langle n \rangle$  inclusive.
- $\langle m \rangle -$ : The page area starts with  $\langle m \rangle$  and all pages to the end of document are selected.
- $-$ : All pages (not very useful).
- $\langle s \rangle$ : The single page  $\langle s \rangle$ .

### 1.1.2 Examples

Options	Output pages
<code>[1, 4, 9]</code>	1, 4, and 9
<code>[7-10, 3]</code>	3, 7, 8, 9, and 10
<code>[odd, 3-6]</code>	3, and 5
<code>[-4, 3, even, 7-8]</code>	2, 4, and 8

## 1.2 Auxiliary files

If a page is suppressed, the `\write` commands are not performed. Labels, index entries, or entries for the table of contents aren’t written. So it is likely that the table of contents, registers, and lists are incomplete.

<sup>2</sup>Url: <ftp://ftp.dante.de/tex-archive/macros/latex209/contrib/misc/selectp.sty>

<sup>3</sup>Donald Arsenau’s email address: [asnd@triumf.ca](mailto:asnd@triumf.ca)

### 1.2.1 Options for handling auxiliary files

**nofiles:** This is the default. Auxiliary files are read but not written or changed.

**nonofiles/files:** Auxiliary files are written.

### 1.2.2 Package hyperref

In old versions of `hyperref` [1999/04/12 v6.55] (and below) there is a bug with `\nofiles`:

- Some “garbage” appears on terminal and in the log file. This is harmless and can be ignored.
- The outline auxiliary file `\jobname.out`, however, is opened and truncated to zero bytes. Version [1999/04/05 v1.0] of this package had loaded a patch file `hypnofil.tex`, if it detects `hyperref` to get `\nofiles` work.

With the new version of `hyperref` [1999/04/13 v6.56] `\nofiles` works now. Therefore the workaround code is no longer needed and removed.

## 2 Installation

### 2.1 Package

Run `pagesel.ins` through `TEX` to get file `pagesel.sty`:

```
tex pagesel.ins
```

Move the file `pagesel.sty` into a directory that is searched by `LATEX`. As location in a TDS tree I recommend:

```
texmf/tex/latex/oberdiek/pagesel.sty      or  
texmf/tex/latex/misc/pagesel.sty
```

### 2.2 Documentation

#### 2.2.1 With L<sup>A</sup>T<sub>E</sub>X

If you have package `hyperref` installed and want to use another driver than the default, use the configuration file `hyperref.cfg` to set your driver choice:

```
\hypersetup{\(your driver\)}
```

The following commands produce the documentation, don’t forget `MakeIndex`’s option `-r`, if you use `hyperref` (eventually you need another cycle with `MakeIndex` and `LATEX`):

```
latex pagesel.dtx  
makeindex -rs gind pagesel  
latex pagesel.dtx  
makeindex -rs gind pagesel  
latex pagesel.dtx
```

### 2.2.2 With pdfL<sup>A</sup>T<sub>E</sub>X

Package `hyperref` for hyperlinks and package `thumbpdf` for thumbnails are supported. Generate the pdf file with the following commands (eventually you need another cycle with `MakeIndex` and pdfL<sup>A</sup>T<sub>E</sub>X):

```
pdflatex pagesel.dtx
makeindex -rs gind pagesel
pdflatex pagesel.dtx
makeindex -rs gind pagesel
pdflatex pagesel.dtx
thumbpdf pagesel
pdflatex pagesel.dtx
hothread pagesel.dtx
```

Within the current pdfL<sup>A</sup>T<sub>E</sub>X there are still problems and bugs with the thread support. The perl script `hothread(.pl)` reads the informations of the `.pdf` and the `.log` file and corrects the `.pdf` file by appending an update section.

## 3 Implementation

### 3.1 Package

```
1 <*package>
If the package is loaded twice, the package code does not work. So stop loading
the package, if it is already loaded.
2 \@ifundefined{ps@makevoid}{}{%
3   \PackageWarningNoLine{pagesel}{Package already loaded.}%
4   \endinput
5 }

\ps@makevoid
6 \newcommand*\ps@makevoid{%
7   \global\setbox\@cclv\copy\voidb@x
8 }

\ps@oddpages
9 \newcommand*\ps@oddpages[0]{}
10 \DeclareOption{odd}{\renewcommand*\ps@oddpages[1]{}}
11 \DeclareOption{even}{\renewcommand*\ps@oddpages[2]{}}

12 \DeclareOption{nofiles}{\let\ps@nofiles\nofiles}
13 \DeclareOption{nonofiles}{\let\ps@nofiles\@empty}
14 \DeclareOption{files}{\let\ps@nofiles\@empty}
15 \ExecuteOptions{nofiles}

16 \DeclareOption*{%
17   \begingroup
18     \expandafter\ps@checkoption\CurrentOption-\END
19     \edef\x{\endgroup\expandafter\ps@store{\ps@first}{\ps@last}}%
20   \x
21 }

\ps@checkoption
22 \newcommand\ps@checkoption{}%
23 \def\ps@checkoption#1-#2\END{%
```

```

24  \ifx\\#2\\%
25    \ifx\\#1\\%
26      % empty option
27      \def\ps@first{\maxdimen}%
28      \def\ps@last{\maxdimen}%
29    \else
30      \edef\ps@first{#1}%
31      \edef\ps@last{#1}%
32    \fi
33  \else
34    \ifx\\#1\\%
35      \def\ps@first{-\maxdimen}%
36    \else
37      \edef\ps@first{#1}%
38    \fi
39    \ps@checklast#2%
40  \fi
41 }

\ps@checklast
42 \newcommand\ps@checklast{}
43 \def\ps@checklast#1-#%
44   \ifx\\#1\\%
45     \def\ps@last{\maxdimen}%
46   \else
47     \edef\ps@last{#1}%
48   \fi
49 }

\ps@store
50 \newcommand*\ps@store}[2]{%
51   \expandafter\def\expandafter\ps@testlist\expandafter{%
52     \ps@testlist\ps@pagetest{#1}{#2}%
53   }%
54 }

\ps@testlist
55 \newcommand*\ps@testlist{}

56 \ProcessOptions

57 \begingroup
58   \edef\x{%
59     \ifnum\ps@oddpages>0 \relax\fi
60     \ifx\ps@testlist\empty\else\relax\fi
61   }%
62   \ifx\x\empty
63     \endgroup
64     \PackageInfo{pagesel}{Nothing to do}
65     \expandafter\endinput
66   \fi
67 \endgroup

68 \RequirePackage{everyshi}

69 \ps@nofiles

```

```

\c@ps@count
70 \newcounter{ps@count}
71 \setcounter{ps@count}{0}

\ps@ReturnAfterElseFi
\ps@ReturnAfterFi 72 \long\def\ps@ReturnAfterElseFi#1\else#2\fi{\fi#1}
73 \long\def\ps@ReturnAfterFi#1\fi{\fi#1}

\ps@ifinset
74 \newcommand{\ps@ifinset}[4]{%
75   \ifnum#1>\value{ps@count}%
76     \ps@ReturnAfterElseFi{#4}%
77   \else
78     \ps@ReturnAfterFi{%
79       \ifnum#2<\value{ps@count}%
80         \ps@ReturnAfterElseFi{#4}%
81       \else
82         \ps@ReturnAfterFi{#3}%
83       \fi
84     }%
85   \fi
86 }

\ps@pagetest
87 \newcommand*\ps@pagetest[2]{%
88   \ps@ifinset{#1}{#2}{\let\ps@next\empty{}}
89 }

90 \EveryShipout{%
91   \stepcounter{ps@count}%
92   \let\ps@next\empty
93   \ifx\ps@testlist\empty
94   \else
95     \let\ps@next\ps@makevoid
96     \ps@testlist
97   \fi
98   \ifnum\ps@oddpages=1
99     \ifodd\value{ps@count}%
100   \else
101     \let\ps@next\ps@makevoid
102   \fi
103 \fi
104 \ifnum\ps@oddpages=2
105   \ifodd\value{ps@count}%
106     \let\ps@next\ps@makevoid
107   \else
108   \fi
109 \fi
110 \ps@next
111 }

112 </package>

```

## 4 History

[1999/03/01 v0.9]

- The first version was built as a response to a question of Dirk Kuypers<sup>4</sup>, published in the newsgroup `de.comp.text.tex`: “Re: pdflatex nur fuer bestimmte Seiten?!?”<sup>5</sup>

[1999/04/05 v1.0]

- Documentation added in dtx format.
- Copyright: LPPL ([CTAN:macros/latex/base/lppl.txt<sup>6</sup>](#))
- Options `odd`, `even` added.
- `\nofiles` added, bug fix for `hyperref`.
- Abort loading of package, if nothing to do.

[1999/04/13 v1.1]

- `\nofiles` bug fix removed because of `hyperref` 6.55.
- First CTAN release.

## 5 Index

Numbers written in italic refer to the page where the corresponding entry is described, the ones underlined to the code line of the definition, the rest to the code lines where the entry is used.

Symbols	N				
<code>\@cclv</code> .....	<u>7</u>	<code>\newcommand</code> .. <u>6</u> , <u>9</u> , <u>22</u> , <u>92</u> , <u>95</u> , <u>101</u> , <u>106</u> , <u>110</u>			
<code>\@empty</code> .....	<u>13</u> , <u>14</u> , <u>60</u> , <u>62</u> , <u>88</u> , <u>92</u> , <u>93</u>	<code>\@newcounter</code> .....	<u>42</u> , <u>50</u> , <u>55</u> , <u>74</u> , <u>87</u>	<code>\ps@nofiles</code> <u>12</u> , <u>13</u> , <u>14</u> , <u>69</u>	
<code>\@ifundefined</code> .....	<u>2</u>	<code>\nofiles</code> .....	<u>12</u>	<code>\ps@oddpages</code> .....	
				<u>9</u> , <u>59</u> , <u>98</u> , <u>104</u>	
C	P				
<code>\c@ps@count</code> .....	<u>70</u>	<code>\PackageInfo</code> .....	<u>64</u>	<code>\ps@pagetest</code> .....	<u>52</u> , <u>87</u>
<code>\copy</code> .....	<u>7</u>	<code>\PackageWarningNoLine</code> .....		<code>\ps@ReturnAfterElseFi</code> .....	<u>72</u> , <u>76</u> , <u>80</u>
<code>\CurrentOption</code> .....	<u>18</u>		<u>3</u>	<code>\ps@ReturnAfterFi</code> .....	
		<code>\ProcessOptions</code> .....	<u>56</u>	<u>72</u> , <u>78</u> , <u>82</u>	
D					
<code>\DeclareOption</code> ..	<u>10</u> , <u>11</u> , <u>12</u> , <u>13</u> , <u>14</u> , <u>16</u>	<code>\ps@checklast</code> .....	<u>39</u> , <u>42</u>	<code>\ps@store</code> .....	<u>19</u> , <u>50</u>
		<code>\ps@checkoption</code> .....	<u>18</u> , <u>22</u>	<code>\ps@testlist</code> .....	<u>51</u> , <u>52</u> , <u>55</u> , <u>60</u> , <u>93</u> , <u>96</u>
		<code>\ps@first</code> .....	<u>19</u> , <u>27</u> , <u>30</u> , <u>35</u> , <u>37</u>		
E					
		<code>\ps@ifinset</code> .....	<u>74</u> , <u>88</u>		
<code>\endinput</code> .....	<u>4</u> , <u>65</u>	<code>\ps@last</code> .....	<u>19</u> , <u>28</u> , <u>31</u> , <u>45</u> , <u>47</u>	<code>\renewcommand</code> ...	<u>10</u> , <u>11</u>
<code>\EveryShipout</code> .....	<u>90</u>	<code>\ps@makevoid</code> .....			
<code>\ExecuteOptions</code> .....	<u>15</u>		<u>6</u> , <u>95</u> , <u>101</u> , <u>106</u>	<code>\RequirePackage</code> ...	<u>68</u>
R					

<sup>4</sup>Dirk Kuypers’s email address: [dk@commets.rwth-aachen.de](mailto:dk@commets.rwth-aachen.de)

<sup>5</sup>Url: [http://www.dejanews.com/\[ST\\_rn=ps\]/getdoc.xp?AN=450111880](http://www.dejanews.com/[ST_rn=ps]/getdoc.xp?AN=450111880)

<sup>6</sup>Url: <ftp://ftp.dante.de/tex-archive/macros/latex/base/lppl.txt>

S	V	X
\setbox ..... 7	\value ... 75, 79, 99, 105	\x ..... 19, 20, 58, 62
\setcounter ..... 71		
\stepcounter ..... 91	\voidb@x .....	7