

# The pdfscape package

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## Abstract

Package `pdfscape` adds PDF support to the environment `landscape` of package `lscape` by setting the PDF page attribute `/Rotate`.

## Contents

<b>1</b>	<b>Documentation</b>	<b>2</b>
1.1	Supported drivers	2
1.2	Caveat	2
1.3	Requirements	2
1.4	Usage	2
<b>2</b>	<b>Implementation</b>	<b>2</b>
2.1	Package identification	2
2.2	Driver options	2
2.3	Autodetection of driver	3
2.3.1	Driver <code>pdftex</code>	3
2.3.2	Driver <code>dvips</code>	3
2.3.3	Driver <code>dvipdfm</code>	4
2.4	Driver implementation	4
2.4.1	<code>pdfTeX</code>	4
2.4.2	PostScript driver	5
2.4.3	Driver <code>dvipdfm</code>	5
2.5	Driver independent stuff	5
<b>3</b>	<b>Installation</b>	<b>6</b>
3.1	Download	6
3.2	Bundle installation	7
3.3	Package installation	7
3.4	Refresh file name databases	7
3.5	Some details for the interested	7
<b>4</b>	<b>History</b>	<b>8</b>
	[2001/01/15 v0.1]	8
	[2001/02/04 v0.2]	8
	[2004/05/11 v0.3]	8
	[2004/05/12 v0.4]	8
	[2006/02/20 v0.5]	8
	[2006/04/24 v0.6]	8
	[2007/04/11 v0.7]	8
	[2007/04/17 v0.8]	8
<b>5</b>	<b>Index</b>	<b>9</b>

# 1 Documentation

## 1.1 Supported drivers

- pdftex
- dvips, dvipsone, pctex32, pctexps (and other drivers that provide a non-empty `\Gin@PS@raw`)
- dvipdfm

## 1.2 Caveat

Depending on the configuration Ghostscript adds a guessed rotation entry by its own. This can lead to two `/Rotate` entries per page. To prevent this behaviour set the parameter `AutoRotatePages` to `/None`, eg:

```
ps2pdf -dAutoRotatePages=/None
```

## 1.3 Requirements

- The package `lscape`.
- The package `atbegshi` for all drivers except `pdftex`.

## 1.4 Usage

Load this package instead of or after package `lscape`:

```
\usepackage{pdfscape}  
\begin{landscape}...\end{landscape}
```

# 2 Implementation

## 2.1 Package identification

```
1 (*package)
```

Package identification.

```
2 \NeedsTeXFormat{LaTeX2e}  
3 \ProvidesPackage{pdfscape}%  
4 [2007/04/17 v0.8 Landscape pages in PDF (H0)]
```

## 2.2 Driver options

```
5 \let\PLS@driver\@empty  
6 \DeclareOption{pdftex}{%  
7   \PassOptionsToPackage\CurrentOption{lscape}%  
8   \def\PLS@driver{pdftex}%  
9 }  
10 \DeclareOption{dvips}{%  
11   \PassOptionsToPackage\CurrentOption{lscape}%  
12   \def\PLS@driver{dvips}%  
13 }  
14 \DeclareOption{dvipsone}{%  
15   \PassOptionsToPackage\CurrentOption{lscape}%  
16   \def\PLS@driver{dvips}%  
17 }  
18 \DeclareOption{pctexps}{%  
19   \PassOptionsToPackage\CurrentOption{lscape}%  
20   \def\PLS@driver{dvips}%  
21 }  
22 \DeclareOption{dvipdfm}{%
```

```

23 \PassOptionsToPackage\CurrentOption{dvipdfm}%
24 \def\PLS@driver{dvipdfm}%
25 }
26 \DeclareOption*{\PassOptionsToPackage\CurrentOption{lscape}}
27 \ProcessOptions
28 \RequirePackage{lscape}

```

## 2.3 Autodetection of driver

### 2.3.1 Driver pdftex

```

29 \def\PLS@temp{pdftex}
30 \ifnum 1=0\ifx\pdfoutput\@undefined
31     \else
32     \ifx\pdfoutput\relax
33     \else
34     \ifnum\pdfoutput>0 %
35     1%
36     \fi
37     \fi
38     \fi
39     \space
40 \ifx\PLS@driver\@empty
41     \let\PLS@driver\PLS@temp
42     \PackageInfo{pdfscape}{Auto-detected driver: ‘\PLS@temp’}%
43 \fi
44 \ifx\PLS@driver\PLS@temp
45 \else
46     \PackageError{pdfscape}{%
47         The driver option ‘\PLS@driver’ is not compatible\MessageBreak
48         with pdfTeX in PDF mode, using driver ‘pdftex’ instead%
49     }\@ehc
50     \let\PLS@driver\PLS@temp
51 \fi
52 \fi

```

### 2.3.2 Driver dvips

```

53 \def\PLS@temp{dvips}
54 \ifnum 1=0\ifx\Gin@PS@raw\@undefined
55     \else
56     \ifx\Gin@PS@raw\relax
57     \else
58     \ifx\Gin@PS@raw\@empty
59     \else
60     1%
61     \fi
62     \fi
63     \fi
64     \space
65 \ifx\PLS@driver\@empty
66     \let\PLS@driver\PLS@temp
67     \PackageInfo{pdfscape}{Auto-detected driver: ‘\PLS@temp’}%
68 \fi
69 \ifx\PLS@driver\PLS@temp
70 \else
71     \PackageError{pdfscape}{%
72         The driver option ‘\PLS@driver’ is not compatible\MessageBreak
73         with detected PostScript driver,\MessageBreak
74         Will try using driver ‘dvips’%
75     }\@ehc
76     \let\PLS@driver\PLS@temp
77 \fi
78 \fi

```

### 2.3.3 Driver dvipdfm

```
79 \def\PLS@temp{dvipdfm.def}
80 \ifx\PLS@temp\Gin@driver
81   \def\PLS@temp{dvipdfm}%
82   \ifx\PLS@driver\@empty
83     \let\PLS@driver\PLS@temp
84     \PackageInfo{pdfscape}{Auto-detected driver: '\PLS@temp'}%
85   \fi
86   \ifx\PLS@driver\PLS@temp
87   \else
88     \PackageError{pdfscape}{%
89       Graphics driver 'dvipdfm.def' is loaded, but this\MessageBreak
90       is incompatible with driver '\PLS@driver'.\MessageBreak
91       Will try using driver 'dvipdfm'%
92     }\@ehc
93     \let\PLS@driver\PLS@temp
94   \fi
95 \fi
96
97 \ifx\PLS@driver\@empty
98   \PackageError{pdfscape}{%
99     Neither pdfTeX, PostScript, nor dvipdfm driver found%
100   }\@ehc
101 \fi
```

## 2.4 Driver implementation

- \PLS@AddRotate #1  
it expects the correct rotation number in #1 and implements the adding of the /Rotate entry in the /Page object of the current page.
- \PLS@RemoveRotate  
it removes a previous /Rotate entry, if necessary.

### 2.4.1 pdfTeX

Not too nice is the global setting of \pdfpageattr. Perhaps this can be changed in future versions.

```
102 \def\PLS@temp{pdftex}
103 \ifx\PLS@temp\PLS@driver
104   \def\PLS@AddRotate#1{%
105     \ifnum#1=0 %
```

Already the default.

```
106     \else
107       \global\pdfpageattr\expandafter{%
108         \the\pdfpageattr
109         /Rotate #1%
110       }%
111     \fi
112   }%
```

Removes a /Rotate entry.

```
113   \def\PLS@RemoveRotate{%
114     \begingroup
115       \global\pdfpageattr\expandafter{\expandafter}%
116       \expandafter\PLS@@RemoveRotate
117       \the\pdfpageattr /Rotate\@nil
118     \endgroup
119   }%
120   \def\PLS@@RemoveRotate#1/Rotate#2\@nil{%
```

Append /Rotate free stuff to \pdfpageattr.

```
121 \global\pdfpageattr\expandafter{\the\pdfpageattr#1}%  
122 \ifx\#2\%
```

Ready, because the detected /Rotate is part of the end marker: /Rotate\@nil

```
123 \else
```

First read in the argument of /Rotate, then continue parsing.

```
124 \afterassignment\PLS@@RemoveRotate  
125 \count0=#2\@nil  
126 \fi  
127 }%  
128 \fi
```

## 2.4.2 PostScript driver

```
129 \def\PLS@temp{dvips}  
130 \ifx\PLS@temp\PLS@driver  
131 \RequirePackage{atbegshi}%  
132 \AtBeginShipout{\PLS@AtBeginShipout}%  
133 \let\PLS@AtBeginShipout\@empty  
134 \def\PLS@AddRotate#1{%  
135 \ifnum#1=0 %  
136 \else  
137 \def\PLS@AtBeginShipout{%  
138 \global\setbox\AtBeginShipoutBox\vbox{%  
139 \Gin@PS@raw{%  
140 [{ThisPage}\string<\string</Rotate #1\string>\string>%  
141 /PUT pdfmark%  
142 }%  
143 \box\AtBeginShipoutBox  
144 }%  
145 }%  
146 \fi  
147 }%  
148 \def\PLS@RemoveRotate{\let\PLS@AtBeginShipout\@empty}%  
149 \fi
```

## 2.4.3 Driver dvipdfm

```
150 \def\PLS@temp{dvipdfm}  
151 \ifx\PLS@temp\PLS@driver  
152 \RequirePackage{atbegshi}%  
153 \AtBeginShipout{\PLS@AtBeginShipout}%  
154 \let\PLS@AtBeginShipout\@empty  
155 \def\PLS@AddRotate#1{%  
156 \ifnum#1=0 %  
157 \else  
158 \def\PLS@AtBeginShipout{%  
159 \global\setbox\AtBeginShipoutBox\vbox{%  
160 \special{pdf: put @thispage <</Rotate #1>>}%  
161 \box\AtBeginShipoutBox  
162 }%  
163 }%  
164 \fi  
165 }%  
166 \def\PLS@RemoveRotate{\let\PLS@AtBeginShipout\@empty}%  
167 \fi
```

## 2.5 Driver independent stuff

The landscape environment is extended by adding the correct /Rotate entries.

```
168 \g@addto@macro{\landscape}{\PLS@Rotate{90}}  
169 \g@addto@macro{\endlandscape}{\PLS@Rotate{0}}
```



**Bundle.** All the packages of the bundle ‘oberdiek’ are also available in a TDS compliant ZIP archive. There the packages are already unpacked and the documentation files are generated. The files and directories obey the TDS standard.

CTAN:macros/latex/contrib/oberdiek/oberdiek-tds.zip

## 3.2 Bundle installation

**Unpacking.** Unpack the oberdiek-tds.zip in the TDS tree (also known as texmf tree) of your choice. Example (linux):

```
unzip oberdiek-tds.zip -d ~/texmf
```

**Script installation.** Check the directory TDS:scripts/oberdiek/ for scripts that need further installation steps. Package attachfile2 comes with the Perl script pdfatfi.pl that should be installed in such a way that it can be called as pdfatfi. Example (linux):

```
chmod +x scripts/oberdiek/pdfatfi.pl
cp scripts/oberdiek/pdfatfi.pl /usr/local/bin/
```

## 3.3 Package installation

**Unpacking.** The .dtx file is a self-extracting docstrip archive. The files are extracted by running the .dtx through plain-TeX:

```
tex pdfscape.dtx
```

**TDS.** Now the different files must be moved into the different directories in your installation TDS tree (also known as texmf tree):

```
pdfscape.sty → tex/latex/oberdiek/pdfscape.sty
pdfscape.pdf → doc/latex/oberdiek/pdfscape.pdf
pdfscape.dtx → source/latex/oberdiek/pdfscape.dtx
```

If you have a docstrip.cfg that configures and enables docstrip’s TDS installing feature, then some files can already be in the right place, see the documentation of docstrip.

## 3.4 Refresh file name databases

If your TeX distribution (TeX, MiKTeX, ...) relies on file name databases, you must refresh these. For example, TeX users run texhash or mktexlsr.

## 3.5 Some details for the interested

**Attached source.** The PDF documentation on CTAN also includes the .dtx source file. It can be extracted by AcrobatReader 6 or higher. Another option is pdftk, e.g. unpack the file into the current directory:

```
pdftk pdfscape.pdf unpack_files output .
```

**Unpacking with L<sup>A</sup>T<sub>E</sub>X.** The .dtx chooses its action depending on the format:

**plain-TeX:** Run docstrip and extract the files.

**L<sup>A</sup>T<sub>E</sub>X:** Generate the documentation.

If you insist on using L<sup>A</sup>T<sub>E</sub>X for docstrip (really, docstrip does not need L<sup>A</sup>T<sub>E</sub>X), then inform the autodetect routine about your intention:

```
latex \let\install=y\input{pdfscape.dtx}
```

Do not forget to quote the argument according to the demands of your shell.

**Generating the documentation.** You can use both the `.dtx` or the `.drv` to generate the documentation. The process can be configured by the configuration file `ltxdoc.cfg`. For instance, put this line into this file, if you want to have A4 as paper format:

```
\PassOptionsToClass{a4paper}{article}
```

An example follows how to generate the documentation with pdfL<sup>A</sup>T<sub>E</sub>X:

```
pdflatex pdfscape.dtx
makeindex -s gind.ist pdfscape.idx
pdflatex pdfscape.dtx
makeindex -s gind.ist pdfscape.idx
pdflatex pdfscape.dtx
```

## 4 History

### [2001/01/15 v0.1]

- First public version, published in `de.comp.text.tex`.

### [2001/02/04 v0.2]

- Minor documentation update.
- CTAN.

### [2004/05/11 v0.3]

- Support for dvipdfm added.

### [2004/05/12 v0.4]

- Bug fix: support for multipage landscape environment for all drivers except for `pdftex`.

### [2006/02/20 v0.5]

- DTX framework.
- LPPL 1.3
- Code is not changed.

### [2006/04/24 v0.6]

- Bug fix: `\PLS@RemoveRotate` reinserted for `\PLS@Rotate`.
- Fix for `\PLS@RemoveRotate` (dvips/dvipdfm): `\PLS@EverhShi` hook is cleared.

### [2007/04/11 v0.7]

- Line ends sanitized.

### [2007/04/17 v0.8]

- Package `atbegshi` replaces `everyshi`.



## 5 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.

Symbols		M	
<code>\@ehc</code> .....	49, 75, 92, 100, 195	<code>\MessageBreak</code> .....	47, 72, 73, 89, 90
<code>\@empty</code> .....	5,	N	
	40, 58, 65, 82, 97, 133, 148, 154, 166	<code>\NeedsTeXFormat</code> .....	2
<code>\@nil</code> .....	117, 120, 125	P	
<code>\@undefined</code> .....	30, 54	<code>\PackageError</code> .....	46, 71, 88, 98, 193
<code>\@whilenum</code> .....	183, 184	<code>\PackageInfo</code> .....	42, 67, 84
<code>\@</code> .....	122, 178	<code>\PassOptionsToPackage</code> .....	
A			7, 11, 15, 19, 23, 26
<code>\addtocounter</code> .....	183, 184	<code>\pdfoutput</code> .....	30, 32, 34
<code>\afterassignment</code> .....	124	<code>\pdfpageattr</code> ..	107, 108, 115, 117, 121
<code>\AtBeginShipout</code> .....	132, 153	<code>\PLS@@RemoveRotate</code> ....	116, 120, 124
<code>\AtBeginShipoutBox</code> ..	138, 143, 159, 161	<code>\PLS@AddRotate</code> ....	104, 134, 155, 175
B		<code>\PLS@AtBeginShipout</code> .....	132,
<code>\box</code> .....	143, 161		133, 137, 148, 153, 154, 158, 166
C		<code>\PLS@CheckAngle</code> .....	172, 177
<code>\count</code> .....	125	<code>\PLS@driver</code> ..	5, 8, 12, 16, 20, 24, 40,
<code>\count@</code> .....	175,		41, 44, 47, 50, 65, 66, 69, 72, 76,
	179, 181, 183, 184, 185, 186,		82, 83, 86, 90, 93, 97, 103, 130, 151
	187, 188, 189, 190, 191, 194, 196	<code>\PLS@RemoveRotate</code> ..	113, 148, 166, 174
<code>\CurrentOption</code> ...	7, 11, 15, 19, 23, 26	<code>\PLS@Rotate</code> .....	168, 169, 170
D		<code>\PLS@temp</code> ...	29, 41, 42, 44, 50, 53,
<code>\DeclareOption</code> ...	6, 10, 14, 18, 22, 26		66, 67, 69, 76, 79, 80, 81, 83, 84,
<code>\do</code> .....	183, 184		86, 93, 102, 103, 129, 130, 150, 151
E		<code>\ProcessOptions</code> .....	27
<code>\endlandscape</code> .....	169	<code>\ProvidesPackage</code> .....	3
G		R	
<code>\g@addto@macro</code> .....	168, 169	<code>\RequirePackage</code> .....	28, 131, 152
<code>\Gin@driver</code> .....	80	S	
<code>\Gin@PS@raw</code> .....	54, 56, 58, 139	<code>\setbox</code> .....	138, 159
I		<code>\space</code> .....	39, 64, 194
<code>\ifnum</code> ...	30, 34, 54, 105, 135, 156,	<code>\special</code> .....	160
	185, 186, 187, 188, 189, 190, 191	T	
<code>\ifx</code> .....	30,	<code>\the</code> .....	108, 117, 121, 175, 194
	32, 40, 44, 54, 56, 58, 65, 69, 80,	V	
	82, 86, 97, 103, 122, 130, 151, 178	<code>\vbox</code> .....	138, 159
L			
<code>\landscape</code> .....	168		