

# The `pdfcol` package

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## Abstract

Since version 1.40 pdfTEX supports color stacks. The driver file `pdftex.def` for package `color` defines and uses a main color stack since version v0.04b. Package `pdfcol` is intended for package writers. It defines macros for setting and maintaining new color stacks.

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\*Please report any issues at <https://github.com/ho-tex/oberdiek/issues>

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## 1 Documentation

Version 1.40 of pdf<sub>T</sub>E<sub>X</sub> adds new primitives `\pdfcolorstackinit` and `\pdfcolorstack`. Now color stacks can be defined and used. A main color stack is maintained by the driver file `pdftex.def` similar to dvips or dvipdfm. However the number of color stacks is not limited to one in pdf<sub>T</sub>E<sub>X</sub>. Thus further color problems can now be solved, such as footnotes across pages or text that is set in parallel columns (e.g. packages `parallel` or `parcolumn`). Unlike the main color stack, the support by additional color stacks cannot be done in a transparent manner.

This package `pdftcol` provides an easier interface to additional color stacks without the need to use the low level primitives.

### 1.1 Requirements

- pdf<sub>T</sub>E<sub>X</sub> 1.40 or greater.
- pdf<sub>T</sub>E<sub>X</sub>in PDF mode. (I don't know a DVI driver that support several color stacks.)
- `pdftex.def` 2007/01/02 v0.04b.

Package `pdftcol` checks the requirements and sets switch `\ifpdftcolAvailable` accordingly.

### 1.2 Interface

#### `\ifpdftcolAvailable`

If the requirements of section 1.1 are met the switch `\ifpdftcolAvailable` behaves as `\iftrue`. Otherwise the other interface macros in this section will be disabled with a message. Also the first use of such a macro will print a message. The messages are print to the `.log` file only if pdf<sub>T</sub>E<sub>X</sub> is not used in PDF mode.

#### `\pdftcolErrorNoStacks`

The first call of `\pdftcolErrorNoStacks` prints an error message, if color stacks are not available.

#### `\pdftcolInitStack {<name>}`

A new color stack is initialized by `\pdftcolInitStack`. The `<name>` is used for indentifying the stack. It usually consists of letters and digits. (The name must survive a `\csname`.)

The intension of the macro is the definition of an additional color stack. Thus the stack is not page bounded like the main color stack. Black (0 g 0 G) is used

as initial color value. And colors are written with modifier `direct` that means without setting the current transfer matrix and changing the current point (see documentation of pdfTeX for `\pdfliteral direct{...}`).

```
\pdfcolIfStackExists {\langle name\rangle} {\langle then\rangle} {\langle else\rangle}
```

Macro `\pdfcolIfStackExists` checks whether color stack `\langle name\rangle` exists. In case of success argument `\langle then\rangle` is executed and `\langle else\rangle` otherwise.

```
\pdfcolSwitchStack {\langle name\rangle}
```

Macro `\pdfcolSwitchStack` switches the color stack. The color macros of package `color` (or `xcolor`) now uses the new color stack with name `\langle name\rangle`.

```
\pdfcolSetcurrentColor
```

Macro `\pdfcolSetcurrentColor` replaces the topmost entry of the stack by the current color (`\current@color`).

```
\pdfcolSetCurrent {\langle name\rangle}
```

Macro `\pdfcolSetCurrent` sets the color that is read in the top-most entry of color stack `\langle name\rangle`. If `\langle name\rangle` is empty, the default color stack is used.

## 2 Implementation

1 (\*package)

### 2.1 Reload check and package identification

Reload check, especially if the package is not used with L<sup>A</sup>T<sub>E</sub>X.

```

2 \begingroup\catcode61\catcode48\catcode32=10\relax%
3   \catcode13=5 % ^^M
4   \endlinechar=13 %
5   \catcode35=6 % #
6   \catcode39=12 % ,
7   \catcode44=12 % ,
8   \catcode45=12 % -
9   \catcode46=12 % .
10  \catcode58=12 % :
11  \catcode64=11 % @
12  \catcode123=1 % {
13  \catcode125=2 % }
14  \expandafter\let\expandafter\x\csname ver@pdfcol.sty\endcsname
15 \ifx\x\relax % plain-TeX, first loading
16 \else
17   \def\empty{}%
18   \ifx\x\empty % LaTeX, first loading,
19     % variable is initialized, but \ProvidesPackage not yet seen
20   \else
21     \expandafter\ifx\x\csname PackageInfo\endcsname\relax
22       \def\x#1#2{%
23         \immediate\write-1{Package #1 Info: #2.}%
24       }%
```

```

25      \else
26          \def\x#1#2{\PackageInfo{#1}{#2, stopped}%
27      \fi
28      \x{pdfcol}{The package is already loaded}%
29      \aftergroup\endinput
30  \fi
31 \fi
32 \endgroup%

```

Package identification:

```

33 \begingroup\catcode61\catcode48\catcode32=10\relax%
34 \catcode13=5 % ^~M
35 \endlinechar=13 %
36 \catcode35=6 % #
37 \catcode39=12 %
38 \catcode40=12 %
39 \catcode41=12 %
40 \catcode44=12 %
41 \catcode45=12 %
42 \catcode46=12 %
43 \catcode47=12 %
44 \catcode58=12 %
45 \catcode64=11 %
46 \catcode91=12 %
47 \catcode93=12 %
48 \catcode123=1 %
49 \catcode125=2 %
50 \expandafter\ifx\csname ProvidesPackage\endcsname\relax
51     \def\x#1#2#3[#4]{\endgroup
52         \immediate\write-1{Package: #3 #4}%
53         \xdef#1[#4]%
54     }%
55 \else
56     \def\x#1#2[#3]{\endgroup
57         #2[{#3}]%
58         \ifx#1@\undefined
59             \xdef#1{#3}%
60         \fi
61         \ifx#1\relax
62             \xdef#1{#3}%
63         \fi
64     }%
65 \fi
66 \expandafter\x\csname ver@pdfcol.sty\endcsname
67 \ProvidesPackage{pdfcol}%
68 [2016/05/16 v1.3 Handle new color stacks for pdfTeX (HO)]%

```

## 2.2 Catcodes

```

69 \begingroup\catcode61\catcode48\catcode32=10\relax%
70 \catcode13=5 % ^~M
71 \endlinechar=13 %
72 \catcode123=1 %
73 \catcode125=2 %
74 \catcode64=11 %
75 \def\x{\endgroup
76 \expandafter\edef\csname PDFCOL@AtEnd\endcsname{%
77     \endlinechar=\the\endlinechar\relax
78     \catcode13=\the\catcode13\relax

```

```

79      \catcode32=\the\catcode32\relax
80      \catcode35=\the\catcode35\relax
81      \catcode61=\the\catcode61\relax
82      \catcode64=\the\catcode64\relax
83      \catcode123=\the\catcode123\relax
84      \catcode125=\the\catcode125\relax
85      }%
86  }%
87 \x\catcode61\catcode48\catcode32=10\relax%
88 \catcode13=5 % ^M
89 \endlinechar=13 %
90 \catcode35=6 % #
91 \catcode64=11 % @
92 \catcode123=1 % {
93 \catcode125=2 % }
94 \def\TMP@EnsureCode#1#2{%
95   \edef\PDFCOL@AtEnd{%
96     \PDFCOL@AtEnd
97     \catcode#1=\the\catcode#1\relax
98   }%
99   \catcode#1=#2\relax
100 }%
101 \TMP@EnsureCode{39}{12}%
102 \TMP@EnsureCode{40}{12}%
103 \TMP@EnsureCode{41}{12}%
104 \TMP@EnsureCode{43}{12}%
105 \TMP@EnsureCode{44}{12}%
106 \TMP@EnsureCode{46}{12}%
107 \TMP@EnsureCode{47}{12}%
108 \TMP@EnsureCode{91}{12}%
109 \TMP@EnsureCode{93}{12}%
110 \TMP@EnsureCode{96}{12}%
111 \edef\PDFCOL@AtEnd{\PDFCOL@AtEnd\noexpand\endinput}

```

## 2.3 Check requirements

```

\PDFCOL@RequirePackage

112 \begingroup\expandafter\expandafter\expandafter\endgroup
113 \expandafter\ifx\csname RequirePackage\endcsname\relax
114   \def\PDFCOL@RequirePackage#1[#2]{\input #1.sty\relax}%
115 \else
116   \def\PDFCOL@RequirePackage#1[#2]{%
117     \RequirePackage{#1}[#2]}%
118   }%
119 \fi

120 \PDFCOL@RequirePackage{ltxcmds}[2010/03/01]

ifpdfcolAvailable
121 \ltx@newif\ifpdfcolAvailable
122 \pdfcolAvailabletrue

2.3.1 Check package luacolor

123 \ltx@newif\ifPDFCOL@luacolor
124 \begingroup\expandafter\expandafter\expandafter\endgroup
125 \expandafter\ifx\csname ver@luacolor.sty\endcsname\relax
126   \PDFCOL@luacolorfalse
127 \else

```

```

128 \PDFCOL@luacolortrue
129 \fi

```

### 2.3.2 Check PDF mode

```

130 \PDFCOL@RequirePackage{infwarerr}[2007/09/09]
131 \PDFCOL@RequirePackage{ifpdf}[2007/09/09]
132 \ifcase\ifpdf\ifPDFCOL@luacolor 1\fi\else 1\fi0 %
133   \def\PDFCOL@Message{%
134     \@PackageWarning{pdfcol}%
135   }%
136 \else
137   \pdfcolAvailablefalse
138   \def\PDFCOL@Message{%
139     \@PackageInfo{pdfcol}%
140   }%
141   \PDFCOL@Message{%
142     Interface disabled because of %
143     \ifPDFCOL@luacolor
144       package 'luacolor'%
145     \else
146       missing PDF mode of pdfTeX%
147     \fi
148   }%
149 \fi

```

### 2.3.3 Check version of pdfTeX

```

150 \ifpdfcolAvailable
151   \begingroup\expandafter\expandafter\expandafter\endgroup
152   \expandafter\ifx\csname pdfcolorstack\endcsname\relax
153   \pdfcolAvailablefalse
154   \PDFCOL@Message{%
155     Interface disabled because of too old pdfTeX.\MessageBreak
156     Required is version 1.40+ for \string\pdfcolorstack
157   }%
158 \fi
159 \fi
160 \ifpdfcolAvailable
161   \begingroup\expandafter\expandafter\expandafter\endgroup
162   \expandafter\ifx\csname pdfcolorstack\endcsname\relax
163   \pdfcolAvailablefalse
164   \PDFCOL@Message{%
165     Interface disabled because of too old pdfTeX.\MessageBreak
166     Required is version 1.40+ for \string\pdfcolorstackinit
167   }%
168 \fi
169 \fi

```

### 2.3.4 Check pdftex.def

```

170 \ifpdfcolAvailable
171   \begingroup\expandafter\expandafter\expandafter\endgroup
172   \expandafter\ifx\csname @pdfcolorstack\endcsname\relax

```

Try to load package color if it is not yet loaded (IATEX case).

```

173   \begingroup\expandafter\expandafter\expandafter\endgroup
174   \expandafter\ifx\csname ver@color.sty\endcsname\relax
175     \begingroup\expandafter\expandafter\expandafter\endgroup
176     \expandafter\ifx\csname documentclass\endcsname\relax
177     \else
178       \RequirePackage[pdftex]{color}\relax

```

```

179      \fi
180      \fi
181      \begingroup\expandafter\expandafter\expandafter\endgroup
182      \expandafter\ifx\csname @pdfcolorstack\endcsname\relax
183          \pdfcolAvailablefalse
184          \PDFCOL@Message{%
185              Interface disabled because ‘pdftex.def’\MessageBreak
186              is not loaded or it is too old.\MessageBreak
187              Required is version 0.04b or greater%
188          }%
189      \fi
190  \fi
191 \fi
192 \let\pdfcolAvailabletrue\relax
193 \let\pdfcolAvailablefalse\relax

2.4 Enabled interface macros

194 \ifpdfcolAvailable

\pdfcolErrorNoStacks
195 \let\pdfcolErrorNoStacks\relax

\pdfcol@Value
196 \expandafter\ifx\csname pdfcol@Value\endcsname\relax
197     \def\pdfcol@Value{0 g 0 G}%
198 \fi

\pdfcol@LiteralModifier
199 \expandafter\ifx\csname pdfcol@LiteralModifier\endcsname\relax
200     \def\pdfcol@LiteralModifier{direct}%
201 \fi

\pdfcolInitStack
202 \def\pdfcolInitStack#1{%
203     \expandafter\ifx\csname pdfcol@Stack@#1\endcsname\relax
204         \global\expandafter\chardef\csname pdfcol@Stack@#1\endcsname=%
205             \pdfcolorstackinit\pdfcol@LiteralModifier{\pdfcol@Value}%
206         \relax
207         \PackageInfo{\pdfcol}{%
208             New color stack ‘#1’ = \number\csname pdfcol@Stack@#1\endcsname
209         }%
210     \else
211         \PackageError{\pdfcol}{%
212             Stack ‘#1’ is already defined%
213         }%
214     \fi
215 }%

\pdfcolIfStackExists
216 \def\pdfcolIfStackExists#1{%
217     \expandafter\ifx\csname pdfcol@Stack@#1\endcsname\relax
218         \expandafter\@secondoftwo
219     \else
220         \expandafter\@firstoftwo
221     \fi
222 }%

```

```

\@firstoftwo
223  \expandafter\ifx\csname @firstoftwo\endcsname\relax
224    \long\def\@firstoftwo#1#2{#1}%
225  \fi

\@secondoftwo
226  \expandafter\ifx\csname @secondoftwo\endcsname\relax
227    \long\def\@secondoftwo#1#2{#2}%
228  \fi

\pdfcolSwitchStack
229  \def\pdfcolSwitchStack#1{%
230    \pdfcolIfStackExists{#1}{%
231      \expandafter\let\expandafter\@pdfcolorstack
232        \csname pdfcol@Stack@#1\endcsname
233    }{%
234      \pdfcol@ErrorNoStack{#1}%
235    }%
236  }%

\pdfcolSetColor
237  \def\pdfcolSetColor{%
238    \pdfcolorstack\@pdfcolorstack set{\current@color}%
239  }%

\pdfcolSetCurrent
240  \def\pdfcolSetCurrent#1{%
241    \ifx\#1\%
242      \pdfcolorstack\@pdfcolorstack current\relax
243    \else
244      \pdfcolIfStackExists{#1}{%
245        \pdfcolorstack\csname pdfcol@Stack@#1\endcsname current\relax
246      }{%
247        \pdfcol@ErrorNoStack{#1}%
248      }%
249    \fi
250  }%

\pdfcol@ErrorNoStack
251  \def\pdfcol@ErrorNoStack#1{%
252    \@PackageError{pdfcol}{Stack '#1' does not exists}\@ehc
253  }%

```

## 2.5 Disabled interface macros

```

254 \else

\pdfcolErrorNoStacks
255  \def\pdfcolErrorNoStacks{%
256    \@PackageError{pdfcol}{%
257      Color stacks are not available%
258    }{%
259      Update pdfTeX (1.40) and 'pdftex.def' (0.04b) %
260      if necessary.\MessageBreak
261      Ensure that 'pdftex.def' is loaded %
262      (package 'color' or 'xcolor').\MessageBreak
263      Further messages can be found in TeX's %

```

```

264      protocol file '\jobname.log'.\MessageBreak
265      \MessageBreak
266      \@ehc
267      }%
268      \global\let\pdfcolErrorNoStacks\relax
269  }%

\PDFCOL@Disabled
270  \def\PDFCOL@Disabled{%
271    \PDFCOL@Message{%
272      pdfTeX's color stacks are not available%
273    }%
274    \global\let\PDFCOL@Disabled\relax
275  }%

\pdfcolInitStack
276  \def\pdfcolInitStack#1{%
277    \PDFCOL@Disabled
278  }%

\pdfcolIfStackExists
279  \long\def\pdfcolIfStackExists#1#2#3{#3}%

\pdfcolSwitchStack
280  \def\pdfcolSwitchStack#1{%
281    \PDFCOL@Disabled
282  }%

\pdfcolSetColor
283  \def\pdfcolSetColor{%
284    \PDFCOL@Disabled
285  }%

\pdfcolSetCurrent
286  \def\pdfcolSetCurrent#1{%
287    \PDFCOL@Disabled
288  }%

289 \fi
290 \PDFCOL@AtEnd%
291 </package>

```

### 3 Test

#### 3.1 Catcode checks for loading

```

292 {*test1}
293 \catcode`\-=1 %
294 \catcode`\-=2 %
295 \catcode`\#=6 %
296 \catcode`\@=11 %
297 \expandafter\ifx\csname count@\endcsname\relax
298   \countdef\count@=255 %
299 \fi
300 \expandafter\ifx\csname @gobble\endcsname\relax
301   \long\def\@gobble#1{}%

```

```

302 \fi
303 \expandafter\ifx\csname @firstofone\endcsname\relax
304   \long\def\@firstofone#1{#1}%
305 \fi
306 \expandafter\ifx\csname loop\endcsname\relax
307   \expandafter\@firstofone
308 \else
309   \expandafter\gobble
310 \fi
311 {%
312   \def\loop#1\repeat{%
313     \def\body{#1}%
314     \iterate
315   }%
316   \def\iterate{%
317     \body
318     \let\next\iterate
319     \else
320       \let\next\relax
321     \fi
322     \next
323   }%
324   \let\repeat=\fi
325 }%
326 \def\RestoreCatcodes{}%
327 \count@=0 %
328 \loop
329   \edef\RestoreCatcodes{%
330     \RestoreCatcodes
331     \catcode\the\count@=\the\catcode\count@\relax
332   }%
333 \ifnum\count@<255 %
334   \advance\count@ 1 %
335 \repeat
336
337 \def\RangeCatcodeInvalid#1#2{%
338   \count@=#1\relax
339   \loop
340     \catcode\count@=15 %
341   \ifnum\count@<#2\relax
342     \advance\count@ 1 %
343   \repeat
344 }
345 \def\RangeCatcodeCheck#1#2#3{%
346   \count@=#1\relax
347   \loop
348     \ifnum#3=\catcode\count@
349     \else
350       \errmessage{%
351         Character \the\count@\space
352         with wrong catcode \the\catcode\count@\space
353         instead of \number#3%
354       }%
355     \fi
356   \ifnum\count@<#2\relax
357     \advance\count@ 1 %
358   \repeat
359 }

```

```

360 \def\space{ }
361 \expandafter\ifx\csname LoadCommand\endcsname\relax
362   \def\LoadCommand{\input pdfcol.sty\relax}%
363 \fi
364 \def\Test{%
365   \RangeCatcodeInvalid{0}{47}%
366   \RangeCatcodeInvalid{58}{64}%
367   \RangeCatcodeInvalid{91}{96}%
368   \RangeCatcodeInvalid{123}{255}%
369   \catcode`\@=12 %
370   \catcode`\\=0 %
371   \catcode`\%=14 %
372   \LoadCommand
373   \RangeCatcodeCheck{0}{36}{15}%
374   \RangeCatcodeCheck{37}{37}{14}%
375   \RangeCatcodeCheck{38}{47}{15}%
376   \RangeCatcodeCheck{48}{57}{12}%
377   \RangeCatcodeCheck{58}{63}{15}%
378   \RangeCatcodeCheck{64}{64}{12}%
379   \RangeCatcodeCheck{65}{90}{11}%
380   \RangeCatcodeCheck{91}{91}{15}%
381   \RangeCatcodeCheck{92}{92}{0}%
382   \RangeCatcodeCheck{93}{96}{15}%
383   \RangeCatcodeCheck{97}{122}{11}%
384   \RangeCatcodeCheck{123}{255}{15}%
385   \RestoreCatcodes
386 }
387 \Test
388 \csname @@end\endcsname
389 \end
390 </test1>

```

### 3.2 Very simple test

```

391 <*test2 | test3>
392 \NeedsTeXFormat{LaTeX2e}
393 \nofiles
394 \documentclass{article}
395 \usepackage{pdfcol}[2016/05/16]
396 \usepackage{qstest}
397 \IncludeTests{*}
398 \LogTests{log}{*}{*}
399 \begin{document}
400   \begin{qstest}{pdfcol}{}
401     \makeatletter
402   <*test2>
403     \Expect*{\ifpdfcolAvailable true\else false\fi}{false}%
404   </test2>
405   <*test3>
406     \Expect*{\ifpdfcolAvailable true\else false\fi}{true}%
407     \Expect*{\number\@pdfcolorstack}{0}%
408   </test3>
409   \setbox0=\hbox{%
410     \pdfcolInitStack{test}%
411   }<*test3>
412     \Expect*{\number\pdfcol@Stack@test}{1}%
413     \Expect*{\number\@pdfcolorstack}{0}%
414   </test3>
415   \pdfcolSwitchStack{test}%

```

```

416 (*test3)
417     \Expect{*{\number\@pdfcolorstack}{1}}
418 
```

```
419     \pdfcolSetCurrent{test}%
420     \pdfcolSetCurrent{}%
421 }
422 \Expect{*{\the\wd0}{0.0pt}}
423 (*test3)
424 \Expect{*{\number\@pdfcolorstack}{0}}
425 \Expect{*{\number\pdfcol@Stack@test}{1}}
426 \Expect{*{\pdfcolIfStackExists{test}{true}{false}}{true}}
427 
```

```
428 \Expect{*{\pdfcolIfStackExists{dummy}{true}{false}}{false}}
429 \end{qstest}%
430 \end{document}
431 
```

```
/test2 | test3}
```

### 3.3 Detection of package **luacolor**

```

432 (*test4)
433 \NeedsTeXFormat{LaTeX2e}
434 \documentclass{article}
435 \usepackage{luacolor}
436 \usepackage{pdfcol}
437 \makeatletter
438 \ifpdfcolAvailable
439 \@latex@error{Detection of package luacolor failed}%
440 \fi
441 \csname @@end\endcsname
442 
```

## 4 Installation

### 4.1 Download

**Package.** This package is available on CTAN<sup>1</sup>:

[CTAN:macros/latex/contrib/oberdiek/pdfcol.dtx](http://ctan.org/pkg/pdfcol) The source file.

[CTAN:macros/latex/contrib/oberdiek/pdfcol.pdf](http://ctan.org/pkg/pdfcol.pdf) Documentation.

**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:install/macros/latex/contrib/oberdiek.tds.zip](http://ctan.org/install/macros/latex/contrib/oberdiek.tds.zip)

TDS refers to the standard “A Directory Structure for T<sub>E</sub>X Files” ([CTAN:tds/tds.pdf](http://ctan.org/texmf)). Directories with `texmf` in their name are usually organized this way.

### 4.2 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
```

---

<sup>1</sup><http://ctan.org/pkg/pdfcol>

**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/
```

### 4.3 Package installation

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

```
tex pdfcol.dtx
```

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

<code>pdfcol.sty</code>	→ <code>tex/generic/oberdiek/pdfcol.sty</code>
<code>pdfcol.pdf</code>	→ <code>doc/latex/oberdiek/pdfcol.pdf</code>
<code>test/pdfcol-test1.tex</code>	→ <code>doc/latex/oberdiek/test/pdfcol-test1.tex</code>
<code>test/pdfcol-test2.tex</code>	→ <code>doc/latex/oberdiek/test/pdfcol-test2.tex</code>
<code>test/pdfcol-test3.tex</code>	→ <code>doc/latex/oberdiek/test/pdfcol-test3.tex</code>
<code>test/pdfcol-test4.tex</code>	→ <code>doc/latex/oberdiek/test/pdfcol-test4.tex</code>
<code>pdfcol.dtx</code>	→ <code>source/latex/oberdiek/pdfcol.dtx</code>

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`.

### 4.4 Refresh file name databases

If your `TEX` distribution (`teTeX`, `mikTeX`, ...) relies on file name databases, you must refresh these. For example, `teTeX` users run `texhash` or `mktextsr`.

### 4.5 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 pdfcol.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 T<sub>E</sub>X:** 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{pdfcol.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 pdfcol.dtx
makeindex -s gind.ist pdfcol.idx
pdflatex pdfcol.dtx
makeindex -s gind.ist pdfcol.idx
pdflatex pdfcol.dtx
```

## 5 Catalogue

The following XML file can be used as source for the **T<sub>E</sub>X Catalogue**. The elements `caption` and `description` are imported from the original XML file from the Catalogue. The name of the XML file in the Catalogue is `pdfcol.xml`.

```
443 (*catalogue)
444 <?xml version='1.0' encoding='us-ascii'?>
445 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
446 <entry datestamp='$Date$' modifier='$Author$' id='pdfcol'>
447   <name>pdfcol</name>
448   <caption>Defines macros fpr maintaining color stacks under pdfTeX.</caption>
449   <authorref id='auth:oberdiek' />
450   <copyright owner='Heiko Oberdiek' year='2007' />
451   <license type='lppl1.3' />
452   <version number='1.3' />
453   <description>
454     Since version 1.40 pdfTeX supports color stacks.
455     The driver file <tt>pdftex.def</tt> for package
456     <xref refid='color'>color</xref> defines and uses a main color
457     stack since version v0.04b.
458     <p/>
459     This package is intended for package writers.
460     It defines macros for setting and maintaining new color stacks.
461     <p/>
462     The package is part of the <xref refid='oberdiek'>oberdiek</xref>
463     bundle.
464   </description>
465   <documentation details='Package documentation'
466     href='ctan:/macros/latex/contrib/oberdiek/pdfcol.pdf' />
467   <ctan file='true' path='/macros/latex/contrib/oberdiek/pdfcol.dtx' />
468   <miktex location='oberdiek' />
469   <texlive location='oberdiek' />
470   <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip' />
471 </entry>
472 </catalogue>
```

## 6 History

[2007/09/09 v1.0]

- First version.

[2007/12/09 v1.1]

- `\pdfcolSetCurrentColor` added.

[2007/12/12 v1.2]

- Detection for package `luacolor` added.

[2016/05/16 v1.3]

- Documentation updates.

## 7 Index

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