

# The pdfcol package

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## Abstract

Since version 1.40 pdfTeX supports color stacks. The driver file `pdf-tex.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>

# 1 Documentation

Version 1.40 of pdfTeX 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 pdfTeX. 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 `pdfcol` provides an easier interface to additional color stacks without the need to use the low level primitives.

## 1.1 Requirements

- pdfTeX 1.40 or greater.
- pdfTeX in PDF mode. (I don't know a DVI driver that support several color stacks.)
- `pdfTeX.def` 2007/01/02 v0.04b.

Package `pdfcol` checks the requirements and sets switch `\ifpdfcolAvailable` accordingly.

## 1.2 Interface

`\ifpdfcolAvailable`

If the requirements of section 1.1 are met the switch `\ifpdfcolAvailable` 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 pdfTeX is not used in PDF mode.

`\pdfcolErrorNoStacks`

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

`\pdfcolInitStack {<name>}`

A new color stack is initialized by `\pdfcolInitStack`. 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 {<name>} {<then>} {<else>}`

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

`\pdfcolSwitchStack {<name>}`

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

`\pdfcolSetCurrentColor`

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

`\pdfcolSetCurrent {<name>}`

Macro `\pdfcolSetCurrent` sets the color that is read in the top-most entry of color stack *<name>*. If *<name>* 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\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\curname 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\curname ver@pdfcol.sty\endcsname
67 \ProvidesPackage{pdfcol}%
68 [2016/05/17 v1.4 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\curname 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

```

LuaTeX Compatability

```

120 \ifx\pdfextension\@undefined\else
121 \PDFCOL@RequirePackage{luatex85}[2016/01/01]
122 \fi
123 \PDFCOL@RequirePackage{ltxcmds}[2010/03/01]

```

ifpdfcolAvailable

```

124 \ltx@newif\ifpdfcolAvailable
125 \pdfcolAvailabletrue

```

### 2.3.1 Check package luacolor

```

126 \ltx@newif\ifPDFCOL@luacolor
127 \begingroup\expandafter\expandafter\expandafter\endgroup
128 \expandafter\ifx\csname ver@luacolor.sty\endcsname\relax
129 \PDFCOL@luacolorfalse
130 \else
131 \PDFCOL@luacolortrue
132 \fi

```

### 2.3.2 Check PDF mode

```

133 \PDFCOL@RequirePackage{infwarerr}[2007/09/09]
134 \PDFCOL@RequirePackage{ifpdf}[2007/09/09]
135 \ifcase\ifpdf\ifPDFCOL@luacolor 1\fi\else 1\fi 0 %
136 \def\PDFCOL@Message{%
137 \@PackageWarningNoLine{pdfcol}%
138 }%
139 \else
140 \pdfcolAvailablefalse
141 \def\PDFCOL@Message{%
142 \@PackageInfoNoLine{pdfcol}%
143 }%
144 \PDFCOL@Message{%
145 Interface disabled because of %
146 \ifPDFCOL@luacolor

```

```

147     package `luacolor'%
148   \else
149     missing PDF mode of pdfTeX%
150   \fi
151 }%
152 \fi

```

### 2.3.3 Check version of pdfTeX

```

153 \ifpdfcolAvailable
154   \begingroup\expandafter\expandafter\expandafter\endgroup
155   \expandafter\ifx\csname pdfcolorstack\endcsname\relax
156     \pdfcolAvailablefalse
157     \PDFCOL@Message{%
158       Interface disabled because of too old pdfTeX.\MessageBreak
159       Required is version 1.40+ for \string\pdfcolorstack
160     }%
161   \fi
162 \fi
163 \ifpdfcolAvailable
164   \begingroup\expandafter\expandafter\expandafter\endgroup
165   \expandafter\ifx\csname pdfcolorstack\endcsname\relax
166     \pdfcolAvailablefalse
167     \PDFCOL@Message{%
168       Interface disabled because of too old pdfTeX.\MessageBreak
169       Required is version 1.40+ for \string\pdfcolorstackinit
170     }%
171   \fi
172 \fi

```

### 2.3.4 Check pdftex.def

```

173 \ifpdfcolAvailable
174   \begingroup\expandafter\expandafter\expandafter\endgroup
175   \expandafter\ifx\csname @pdfcolorstack\endcsname\relax
176     Try to load package color if it is not yet loaded (LATEX case).
177     \begingroup\expandafter\expandafter\expandafter\endgroup
178     \expandafter\ifx\csname ver@color.sty\endcsname\relax
179       \begingroup\expandafter\expandafter\expandafter\endgroup
180       \expandafter\ifx\csname documentclass\endcsname\relax
181         \else
182           \RequirePackage[pdftex]{color}\relax
183         \fi
184       \fi
185     \begingroup\expandafter\expandafter\expandafter\endgroup
186     \expandafter\ifx\csname @pdfcolorstack\endcsname\relax
187       \pdfcolAvailablefalse
188       \PDFCOL@Message{%
189         Interface disabled because `pdftex.def'\MessageBreak
190         is not loaded or it is too old.\MessageBreak
191         Required is version 0.04b or greater%
192       }%
193     \fi
194   \fi
195 \let\pdfcolAvailabletrue\relax
196 \let\pdfcolAvailablefalse\relax

```

## 2.4 Enabled interface macros

```

197 \ifpdfcolAvailable
198   \pdfcolErrorNoStacks
199   \let\pdfcolErrorNoStacks\relax

```

```

\pdfcol@Value
209 \expandafter\ifx\csname pdfcol@Value\endcsname\relax
200 \def\pdfcol@Value{0 g 0 G}%
201 \fi

\pdfcol@LiteralModifier
202 \expandafter\ifx\csname pdfcol@LiteralModifier\endcsname\relax
203 \def\pdfcol@LiteralModifier{direct}%
204 \fi

\pdfcolInitStack
205 \def\pdfcolInitStack#1{%
206 \expandafter\ifx\csname pdfcol@Stack@#1\endcsname\relax
207 \global\expandafter\chardef\csname pdfcol@Stack@#1\endcsname=%
208 \pdfcolorstackinit\pdfcol@LiteralModifier{\pdfcol@Value}%
209 \relax
210 \@PackageInfo{pdfcol}{%
211 New color stack `#1' = \number\csname pdfcol@Stack@#1\endcsname
212 }%
213 \else
214 \@PackageError{pdfcol}{%
215 Stack `#1' is already defined%
216 }\@ehc
217 \fi
218 }%

\pdfcolIfStackExists
219 \def\pdfcolIfStackExists#1{%
220 \expandafter\ifx\csname pdfcol@Stack@#1\endcsname\relax
221 \expandafter\@secondoftwo
222 \else
223 \expandafter\@firstoftwo
224 \fi
225 }%

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

\@secondoftwo
229 \expandafter\ifx\csname @secondoftwo\endcsname\relax
230 \long\def\@secondoftwo#1#2{#2}%
231 \fi

\pdfcolSwitchStack
232 \def\pdfcolSwitchStack#1{%
233 \pdfcolIfStackExists{#1}{%
234 \expandafter\let\expandafter\@pdfcolorstack
235 \csname pdfcol@Stack@#1\endcsname
236 }{%
237 \pdfcol@ErrorNoStack{#1}%
238 }%
239 }%

\pdfcolSetCurrentColor
240 \def\pdfcolSetCurrentColor{%
241 \pdfcolorstack\@pdfcolorstack set{\current@color}%
242 }%

```

```

\pdfcolSetCurrent
243 \def\pdfcolSetCurrent#1{%
244 \ifx\#1\%
245 \pdfcolorstack\@pdfcolorstack current\relax
246 \else
247 \pdfcolIfStackExists{#1}{%
248 \pdfcolorstack\cstackname pdfcol@Stack@#1\endcstackname current\relax
249 }{%
250 \pdfcol@ErrorNoStack{#1}%
251 }%
252 \fi
253 }%

```

```

\pdfcol@ErrorNoStack
254 \def\pdfcol@ErrorNoStack#1{%
255 \@PackageError{pdfcol}{Stack `#1' does not exists}\@ehc
256 }%

```

## 2.5 Disabled interface macros

```

257 \else

```

```

\pdfcolErrorNoStacks
258 \def\pdfcolErrorNoStacks{%
259 \@PackageError{pdfcol}{%
260 Color stacks are not available%
261 }{%
262 Update pdfTeX (1.40) and `pdftex.def' (0.04b) %
263 if necessary.\MessageBreak
264 Ensure that `pdftex.def' is loaded %
265 (package `color' or `xcolor').\MessageBreak
266 Further messages can be found in TeX's %
267 protocol file `jobname.log'.\MessageBreak
268 \MessageBreak
269 \@ehc
270 }%
271 \global\let\pdfcolErrorNoStacks\relax
272 }%

```

```

\PDFCOL@Disabled
273 \def\PDFCOL@Disabled{%
274 \PDFCOL@Message{%
275 pdfTeX's color stacks are not available%
276 }%
277 \global\let\PDFCOL@Disabled\relax
278 }%

```

```

\pdfcolInitStack
279 \def\pdfcolInitStack#1{%
280 \PDFCOL@Disabled
281 }%

```

```

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

```

```

\pdfcolSwitchStack
283 \def\pdfcolSwitchStack#1{%
284 \PDFCOL@Disabled
285 }%

```



\pdfcolSetCurrentColor

```
286 \def\pdfcolSetCurrentColor{%  
287 \PDFCOL@Disabled  
288 }%
```

\pdfcolSetCurrent

```
289 \def\pdfcolSetCurrent#1{%  
290 \PDFCOL@Disabled  
291 }%
```

```
292 \fi  
293 \PDFCOL@AtEnd%  
294 \endpackage
```

## 3 Test

### 3.1 Catcode checks for loading

```
295 \test1  
  
296 \catcode`\{=1 %  
297 \catcode`\}=2 %  
298 \catcode`\#=6 %  
299 \catcode`\@=11 %  
300 \expandafter\ifx\csname count@\endcsname\relax  
301 \countdef\count@=255 %  
302 \fi  
303 \expandafter\ifx\csname @gobble\endcsname\relax  
304 \long\def\@gobble#1{%  
305 \fi  
306 \expandafter\ifx\csname @firstofone\endcsname\relax  
307 \long\def\@firstofone#1{#1}%  
308 \fi  
309 \expandafter\ifx\csname loop\endcsname\relax  
310 \expandafter\@firstofone  
311 \else  
312 \expandafter\@gobble  
313 \fi  
314 {%  
315 \def\loop#1\repeat{%  
316 \def\body{#1}%  
317 \iterate  
318 }%  
319 \def\iterate{%  
320 \body  
321 \let\next\iterate  
322 \else  
323 \let\next\relax  
324 \fi  
325 \next  
326 }%  
327 \let\repeat=\fi  
328 }%  
329 \def\RestoreCatcodes{}  
330 \count@=0 %  
331 \loop  
332 \edef\RestoreCatcodes{%  
333 \RestoreCatcodes  
334 \catcode\the\count@=\the\catcode\count@\relax  
335 }%  
336 \ifnum\count@<255 %  
337 \advance\count@ 1 %
```

```

338 \repeat
339
340 \def\RangeCatcodeInvalid#1#2{%
341   \count@=#1\relax
342   \loop
343     \catcode\count@=15 %
344     \ifnum\count@<#2\relax
345       \advance\count@ 1 %
346     \repeat
347 }
348 \def\RangeCatcodeCheck#1#2#3{%
349   \count@=#1\relax
350   \loop
351     \ifnum#3=\catcode\count@
352     \else
353       \errmessage{%
354         Character \the\count@\space
355         with wrong catcode \the\catcode\count@\space
356         instead of \number#3%
357       }%
358     \fi
359     \ifnum\count@<#2\relax
360       \advance\count@ 1 %
361     \repeat
362 }
363 \def\space{ }
364 \expandafter\ifx\csname LoadCommand\endcsname\relax
365   \def\LoadCommand{\input pdfcol.sty\relax}%
366 \fi
367 \def\Test{%
368   \RangeCatcodeInvalid{0}{47}%
369   \RangeCatcodeInvalid{58}{64}%
370   \RangeCatcodeInvalid{91}{96}%
371   \RangeCatcodeInvalid{123}{255}%
372   \catcode`\@=12 %
373   \catcode`\=0 %
374   \catcode`\%=14 %
375   \LoadCommand
376   \RangeCatcodeCheck{0}{36}{15}%
377   \RangeCatcodeCheck{37}{37}{14}%
378   \RangeCatcodeCheck{38}{47}{15}%
379   \RangeCatcodeCheck{48}{57}{12}%
380   \RangeCatcodeCheck{58}{63}{15}%
381   \RangeCatcodeCheck{64}{64}{12}%
382   \RangeCatcodeCheck{65}{90}{11}%
383   \RangeCatcodeCheck{91}{91}{15}%
384   \RangeCatcodeCheck{92}{92}{0}%
385   \RangeCatcodeCheck{93}{96}{15}%
386   \RangeCatcodeCheck{97}{122}{11}%
387   \RangeCatcodeCheck{123}{255}{15}%
388   \RestoreCatcodes
389 }
390 \Test
391 \csname @@end\endcsname
392 \end
393 </test1>

```

## 3.2 Very simple test

```

394 <*test2j test3>
395 \NeedsTeXFormat{LaTeX2e}
396 \nofiles
397 \documentclass{article}

```

```

398 \usepackage{pdfcol}[2016/05/17]
399 \usepackage{qstest}
400 \IncludeTests{*}
401 \LogTests{log}{*}{*}
402 \begin{document}
403   \begin{qstest}{pdfcol}{}%
404     \makeatletter
405     (*test2)
406     \Expect*{\ifpdfcolAvailable true\else false\fi}{false}%
407   (/test2)
408   (*test3)
409   \Expect*{\ifpdfcolAvailable true\else false\fi}{true}%
410   \Expect*{\number\@pdfcolorstack}{0}%
411 (/test3)
412   \setbox0=\hbox{%
413     \pdfcolInitStack{test}%
414   (*test3)
415     \Expect*{\number\pdfcol@Stack@test}{1}%
416     \Expect*{\number\@pdfcolorstack}{0}%
417   (/test3)
418     \pdfcolSwitchStack{test}%
419   (*test3)
420     \Expect*{\number\@pdfcolorstack}{1}%
421 (/test3)
422     \pdfcolSetCurrent{test}%
423     \pdfcolSetCurrent{}%
424   }%
425   \Expect*{\the\wd0}{0.0pt}%
426 (*test3)
427   \Expect*{\number\@pdfcolorstack}{0}%
428   \Expect*{\number\pdfcol@Stack@test}{1}%
429   \Expect*{\pdfcolIfStackExists{test}{true}{false}}{true}%
430 (/test3)
431   \Expect*{\pdfcolIfStackExists{dummy}{true}{false}}{false}%
432 \end{qstest}%
433 \end{document}
434 (/test2 j test3)

```

### 3.3 Detection of package luacolor

```

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

```

## 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/macros/latex/contrib/oberdiek/pdfcol.dtx) The source file.

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

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

**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](#)

*TDS* refers to the standard “A Directory Structure for T<sub>E</sub>X Files” ([CTAN:tds/tds.pdf](#)). 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
```

**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 T<sub>E</sub>X:

```
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 T<sub>E</sub>X distribution (teT<sub>E</sub>X, mikT<sub>E</sub>X, ...) relies on file name databases, you must refresh these. For example, teT<sub>E</sub>X users run `texhash` or `mktextlsr`.

## 4.5 Some details for the interested

**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`.

```
446 (*catalogue)
447 <?xml version='1.0' encoding='us-ascii'?>
448 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
449 <entry datestamp='$Date$' modifier='$Author$' id='pdfcol'>
450   <name>pdfcol</name>
451   <caption>Defines macros fpr maintaining color stacks under pdfTeX.</caption>
452   <authorref id='auth:oberdiek'>
453     <copyright owner='Heiko Oberdiek' year='2007'>
454       <license type='lppl1.3'>
455         <version number='1.4'>
456           <description>
457             Since version 1.40 pdfTeX supports color stacks.
458             The driver file <tt>pdftex.def</tt> for package
459             <xref refid='color'>color</xref> defines and uses a main color
460             stack since version v0.04b.
461           <p/>
462             This package is intended for package writers.
463             It defines macros for setting and maintaining new color stacks.
464           <p/>
465             The package is part of the <xref refid='oberdiek'>oberdiek</xref>
466             bundle.
467         </description>
468         <documentation details='Package documentation'
469           href='ctan:/macros/latex/contrib/oberdiek/pdfcol.pdf'>
470           <ctan file='true' path='/macros/latex/contrib/oberdiek/pdfcol.dtx'>
471             <miktex location='oberdiek'>
472               <texlive location='oberdiek'>
473                 <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'>
474               </entry>
475             </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.

[2016/05/17 v1.4]

- Use luatex85 package for new luatex compatibility

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Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; plain numbers refer to the code lines where the entry is used.

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