

The pdfcol package

Heiko Oberdiek*

<heiko.oberdiek at gmail.com>

2018/11/01 v1.5

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.

Contents

1	Documentation	2
1.1	Requirements	2
1.2	Interface	2
2	Implementation	3
2.1	Reload check and package identification	3
2.2	Catcodes	4
2.3	Check requirements	5
2.3.1	Check package <code>luacolor</code>	5
2.3.2	Check PDF mode	5
2.3.3	Check version of pdfTeX	6
2.3.4	Check <code>pdftex.def</code>	6
2.4	Enabled interface macros	6
2.5	Disabled interface macros	8
3	Test	9
3.1	Catcode checks for loading	9
3.2	Very simple test	10
3.3	Detection of package <code>luacolor</code>	11
4	Installation	11
4.1	Download	11
4.2	Bundle installation	12
4.3	Package installation	12
4.4	Refresh file name databases	12
4.5	Some details for the interested	12
5	Catalogue	13
6	History	13
	[2007/09/09 v1.0]	13
	[2007/12/09 v1.1]	13
	[2007/12/12 v1.2]	14
	[2016/05/16 v1.3]	14
	[2016/05/17 v1.4]	14
	[2018/11/01 v1.5]	14

*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 dvi2pdf. 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^AT_EX.

```
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\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 [2018/11/01 v1.5 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\cename 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 \def\pdfcolorstackinit {\pdffeedback colorstackinit}
122 \protected\def\pdfcolorstack {\pdfextension colorstack}
123 \fi
124 \PDFCOL@RequirePackage{ltxcmds}[2010/03/01]

```

ifpdfcolAvailable

```

125 \ltx@newif\ifpdfcolAvailable
126 \pdfcolAvailabletrue

```

2.3.1 Check package luacolor

```

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

```

2.3.2 Check PDF mode

```

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

```

```

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

```

2.3.3 Check version of pdfTeX

```

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

```

2.3.4 Check pdftex.def

```

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

```

2.4 Enabled interface macros

```

198 \ifpdfcolAvailable
199 \pdfcolErrorNoStacks
200 \let\pdfcolErrorNoStacks\relax

```

```

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

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

\pdfcolInitStack
206 \def\pdfcolInitStack#1{%
207 \expandafter\ifx\csname pdfcol@Stack@#1\endcsname\relax
208 \global\expandafter\chardef\csname pdfcol@Stack@#1\endcsname=%
209 \pdfcolorstackinit\pdfcol@LiteralModifier{\pdfcol@Value}%
210 \relax
211 \@PackageInfo{pdfcol}{%
212 New color stack `#1' = \number\csname pdfcol@Stack@#1\endcsname
213 }%
214 \else
215 \@PackageError{pdfcol}{%
216 Stack `#1' is already defined%
217 }\@ehc
218 \fi
219 }%

\pdfcolIfStackExists
220 \def\pdfcolIfStackExists#1{%
221 \expandafter\ifx\csname pdfcol@Stack@#1\endcsname\relax
222 \expandafter\@secondoftwo
223 \else
224 \expandafter\@firstoftwo
225 \fi
226 }%

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

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

\pdfcolSwitchStack
233 \def\pdfcolSwitchStack#1{%
234 \pdfcolIfStackExists{#1}{%
235 \expandafter\let\expandafter\@pdfcolorstack
236 \csname pdfcol@Stack@#1\endcsname
237 }{%
238 \pdfcol@ErrorNoStack{#1}%
239 }%
240 }%

\pdfcolSetCurrentColor
241 \def\pdfcolSetCurrentColor{%
242 \pdfcolorstack\@pdfcolorstack set{\current@color}%
243 }%

```

```

\pdfcolSetCurrent
244 \def\pdfcolSetCurrent#1{%
245 \ifx\|#1\|}%
246 \pdfcolorstack\@pdfcolorstack current\relax
247 \else
248 \pdfcolIfStackExists{#1}{%
249 \pdfcolorstack\cstackname pdfcol@Stack@#1\endcstackname current\relax
250 }{%
251 \pdfcol@ErrorNoStack{#1}%
252 }%
253 \fi
254 }%

```

```

\pdfcol@ErrorNoStack
255 \def\pdfcol@ErrorNoStack#1{%
256 \@PackageError{pdfcol}{Stack `#1' does not exists}\@ehc
257 }%

```

2.5 Disabled interface macros

```

258 \else

\pdfcolErrorNoStacks
259 \def\pdfcolErrorNoStacks{%
260 \@PackageError{pdfcol}{%
261 Color stacks are not available%
262 }{%
263 Update pdfTeX (1.40) and `pdftex.def' (0.04b) %
264 if necessary.\MessageBreak
265 Ensure that `pdftex.def' is loaded %
266 (package `color' or `xcolor').\MessageBreak
267 Further messages can be found in TeX's %
268 protocol file `jobname.log'.\MessageBreak
269 \MessageBreak
270 \@ehc
271 }%
272 \global\let\pdfcolErrorNoStacks\relax
273 }%

\PDFCOL@Disabled
274 \def\PDFCOL@Disabled{%
275 \PDFCOL@Message{%
276 pdfTeX's color stacks are not available%
277 }%
278 \global\let\PDFCOL@Disabled\relax
279 }%

```

```

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

```

```

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

```

```

\pdfcolSwitchStack
284 \def\pdfcolSwitchStack#1{%
285 \PDFCOL@Disabled
286 }%

```


\pdfcolSetCurrentColor

```
287 \def\pdfcolSetCurrentColor{%
288   \PDFCOL@Disabled
289 }%
```

\pdfcolSetCurrent

```
290 \def\pdfcolSetCurrent#1{%
291   \PDFCOL@Disabled
292 }%
```

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

3 Test

3.1 Catcode checks for loading

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

```

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

```

3.2 Very simple test

```

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

```

```

399 \usepackage{pdfcol}[2018/11/01]
400 \usepackage{qstest}
401 \IncludeTests{*}
402 \LogTests{log}{*}{*}
403 \begin{document}
404   \begin{qstest}{pdfcol}{}%
405     \makeatletter
406     (*test2)
407     \Expect*{\ifpdfcolAvailable true\else false\fi}{false}%
408   (/test2)
409   (*test3)
410   \Expect*{\ifpdfcolAvailable true\else false\fi}{true}%
411   \Expect*{\number\@pdfcolorstack}{0}%
412 (/test3)
413   \setbox0=\hbox{%
414     \pdfcolInitStack{test}%
415   (*test3)
416     \Expect*{\number\pdfcol@Stack@test}{1}%
417     \Expect*{\number\@pdfcolorstack}{0}%
418   (/test3)
419     \pdfcolSwitchStack{test}%
420   (*test3)
421     \Expect*{\number\@pdfcolorstack}{1}%
422 (/test3)
423     \pdfcolSetCurrent{test}%
424     \pdfcolSetCurrent{}%
425   }%
426   \Expect*{\the\wd0}{0.0pt}%
427 (*test3)
428   \Expect*{\number\@pdfcolorstack}{0}%
429   \Expect*{\number\pdfcol@Stack@test}{1}%
430   \Expect*{\pdfcolIfStackExists{test}{true}{false}}{true}%
431 (/test3)
432   \Expect*{\pdfcolIfStackExists{dummy}{true}{false}}{false}%
433 \end{qstest}%
434 \end{document}
435 (/test2 j test3)

```

3.3 Detection of package luacolor

```

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

```

4 Installation

4.1 Download

Package. This package is available on CTAN¹:

[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.

¹<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_EX 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_EX:

```
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):

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

4.4 Refresh file name databases

If your T_EX distribution (teT_EX, mikT_EX, ...) relies on file name databases, you must refresh these. For example, teT_EX users run `texhash` or `mktextlsr`.

4.5 Some details for the interested

Unpacking with L^AT_EX. The `.dtx` chooses its action depending on the format:

plain T_EX: Run `docstrip` and extract the files.

L^AT_EX: Generate the documentation.

If you insist on using L^AT_EX for `docstrip` (really, `docstrip` does not need L^AT_EX), 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^AT_EX:

```
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_EX 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`.

```
447 (*catalogue)
448 <?xml version='1.0' encoding='us-ascii'?>
449 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
450 <entry datestamp='$Date$' modifier='$Author$' id='pdfcol'>
451   <name>pdfcol</name>
452   <caption>Defines macros fpr maintaining color stacks under pdfTeX.</caption>
453   <authorref id='auth:oberdiek'>
454     <copyright owner='Heiko Oberdiek' year='2007'>
455       <license type='lppl1.3'>
456         <version number='1.5'>
457           <description>
458             Since version 1.40 pdfTeX supports color stacks.
459             The driver file <tt>pdftex.def</tt> for package
460             <xref refid='color'>color</xref> defines and uses a main color
461             stack since version v0.04b.
462           <p/>
463             This package is intended for package writers.
464             It defines macros for setting and maintaining new color stacks.
465           <p/>
466             The package is part of the <xref refid='oberdiek'>oberdiek</xref>
467             bundle.
468           </description>
469           <documentation details='Package documentation'
470             href='ctan:/macros/latex/contrib/oberdiek/pdfcol.pdf'>
471             <ctan file='true' path='/macros/latex/contrib/oberdiek/pdfcol.dtx'>
472             <miktex location='oberdiek'>
473             <texlive location='oberdiek'>
474             <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'>
475           </entry>
476 </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

[2018/11/01 v1.5]

- Remove luatex85 dependency

7 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; plain numbers refer to the code lines where the entry is used.

Symbols			
\#	299	\count@	302, 331, 335, 337, 338, 342, 344, 345, 346, 350, 352, 355, 356, 360, 361
%	375	\countdef	302
\@	300, 373	\csname	14, 21, 50, 66, 76, 113, 129, 156, 166, 176, 178, 180, 186, 200, 203, 207, 208, 212, 221, 227, 230, 236, 249, 301, 304, 307, 310, 365, 392, 445
\@PackageError	215, 256, 260	\current@color	242
\@PackageInfo	211	D	
\@PackageInfoNoLine	143	\documentclass	398, 438
\@PackageWarningNoLine	138	E	
\@ehc	217, 256, 270	\empty	17, 18
\@firstofone	308, 311	\end	393, 433, 434
\@firstoftwo	224, 227	\endcsname	14, 21, 50, 66, 76, 113, 129, 156, 166, 176, 178, 180, 186, 200, 203, 207, 208, 212, 221, 227, 230, 236, 249, 301, 304, 307, 310, 365, 392, 445
\@gobble	305, 313	\endinput	29, 111
\@latex@error	443	\endlinechar	4, 35, 71, 77, 89
\@pdfcolorstack	235, 242, 246, 411, 417, 421, 428	\errmessage	354
\@secondoftwo	222, 230	\Expect	407, 410, 411, 416, 417, 421, 426, 428, 429, 430, 432
\@undefined	58, 120	H	
\\	245, 374	\hbox	413
\{	297	I	
\}	298	\ifcase	136
A		\ifnum	337, 345, 352, 360
\advance	338, 346, 361	\ifpdf	136
\aftergroup	29	\ifPDFCOL@luacolor	127, 136, 147
B		\ifpdfcolAvailable	2, 125, 125, 154, 164, 174, 198, 407, 410, 442
\begin	403, 404	\ifx	15, 18, 21, 50, 58, 61, 113, 120, 129, 156, 166, 176, 178, 180,
\body	317, 321		
C			
\catcode	2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 69, 70, 72, 73, 74, 78, 79, 80, 81, 82, 83, 84, 87, 88, 90, 91, 92, 93, 97, 99, 297, 298, 299, 300, 335, 344, 352, 356, 373, 374, 375		
\chardef	208		

186, 200, 203, 207, 221, 227, 230, 245, 301, 304, 307, 310, 365	\pdfcolAvailabletrue 126, 196
\immediate 23, 52	\pdfcolErrorNoStacks 2, 199, 259
\IncludeTests 401	\pdfcolIfStackExists 2, 220, 234, 248, 283, 430, 432
\input 114, 366	\pdfcolInitStack 2, 206, 280, 414
\iterate 318, 320, 322	\pdfcolorstack . . 122, 160, 242, 246, 249
J	\pdfcolorstackinit 121, 170, 209
\jobname 268	\pdfcolSetCurrent . . 3, 244, 290, 423, 424
L	\pdfcolSetCurrentColor . . . 3, 241, 287
\LoadCommand 366, 376	\pdfcolSwitchStack . . . 3, 233, 284, 419
\LogTests 402	\pdfextension 120, 122
\loop 316, 332, 343, 351	\pdffeedback 121
\ltx@newif 125, 127	\protected 122
M	\ProvidesPackage 19, 67
\makeatletter 405, 441	R
\MessageBreak 159, 169, 189, 190, 264, 266, 268, 269	\RangeCatcodeCheck 349, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388
N	\RangeCatcodeInvalid 341, 369, 370, 371, 372
\NeedsTeXFormat 396, 437	\repeat 316, 328, 339, 347, 362
\next 322, 324, 326	\RequirePackage 117, 182
\nofiles 397	\RestoreCatcodes . . 330, 333, 334, 389
\number 212, 357, 411, 416, 417, 421, 428, 429	S
P	\setbox 413
\PackageInfo 26	\space 355, 356, 364
\PDFCOL@AtEnd 95, 96, 111, 294	T
\PDFCOL@Disabled 274, 281, 285, 288, 291	\Test 368, 391
\pdfcol@ErrorNoStack . . . 238, 251, 255	\the 77, 78, 79, 80, 81, 82, 83, 84, 97, 335, 355, 356, 426
\pdfcol@LiteralModifier 203, 209	\TMP@EnsureCode 94, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110
\PDFCOL@luacolorfalse 130	U
\PDFCOL@luacolortrue 132	\usepackage 399, 400, 439, 440
\PDFCOL@Message 137, 142, 145, 158, 168, 188, 275	W
\PDFCOL@RequirePackage 112, 124, 134, 135	\wd 426
\pdfcol@Stack@test 416, 429	\write 23, 52
\pdfcol@Value 200, 209	X
\pdfcolAvailablefalse 141, 157, 167, 187, 197	\x 14, 15, 18, 22, 26, 28, 51, 56, 66, 75, 87