

The `pdfcolmk` package

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Abstract

This package tries a solution for the missing color stack of pdftEX.

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1 Documentation

1.1 Introduction

This package uses a mark register in order to solve the problem of a missing color stack of pdfTeX prior 1.40.0. Since this version of pdfTeX a color stack is available and supported by `pdftex.def` 2007/01/01 v0.04a. In this case this package is obsolete and the package stops its loading.

1.2 Background

After the Dante meeting (Clausthal 2000) I have started to experiment with the eTeX method of a *colour* mark. One of the major problems is the understanding of the output routine and the need to rewrite it because of missing hooks. Currently I have made some tests in onecolumn and twocolumn mode, but the state is experimental.

1.3 Limitations

- Mark limitations: page breaks in math.
- L^AT_EX's output routine is redefined.
 - Changes in the output routine of newer versions of LaTeX are not detected.
 - Packages that change the output routine are not supported.
- It does not support several independent text streams like footnotes.
- Limitations in float and marginpar support.

1.4 Recommendation

ε -TeX (for additional mark register) Without ε -TeX L^AT_EX's mark commands are redefined to store an additional color value.

1.5 Usage

Load after package `color`:

```
\usepackage[pdftex]{color}
\usepackage{pdfcolmk}
```

1.6 Compatibility

- Load the following packages after `pdfcolmk`:
`mparhack.sty`
- Load the following packages before `pdfcolmk`:
`marn.sty`
`newmarn.sty`
- Supported `\@addmarginpar` patch:
`latex/base/latex.ltx`
`memoir.cls`
`poemscol/marn.sty, poemscol/newmarn.sty`
`mparhack.sty`
- Unsupported `\@addmarginpar` patch:

lineno.sty
 sttools/marginal.sty
 revtex4.cls

2 Implementation

```

1 <*package>
Package identification.
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{pdfcolmk}%
4 [2008/08/11 v1.2 Color support for pdfTeX via marks (HO)]
5 \@ifundefined{ver@pdftex.def}{%
6   \PackageWarningNoLine{pdfcolmk}{%
7     Nothing to fix, because \string`pdftex.def`\string' not loaded%
8   }%
9   \endinput
10 }{%
11 \@ifpackageloaded{color}{%
12   \PackageWarningNoLine{pdfcolmk}{%
13     Nothing to fix, because \string`color.sty`\string' not loaded%
14   }%
15   \endinput
16 }%
17 \begingroup\expandafter\expandafter\expandafter\endgroup
18 \expandafter\ifx\csname main@pdfcolorstack\endcsname\relax
19 \else
20   % pdftex.def >= 2007/01/01 0.04a and pdfTeX >= 1.40.0
21   \begingroup
22     \let\on@line\empty
23     \PackageInfo{pdfcolmk}{%
24       The color stack of pdfTeX \string>\string`\string= 1.40 is used. %
25       Therefore\MessageBreak
26       this package is not necessary and not loaded%
27     }%
28   \endgroup
29   \expandafter\endinput
30 \fi
31
32 \PackageInfo{pdfcolmk}{%
33   This package tries to simulate dvips's color stack\MessageBreak
34   for pdfTeX based on a mark register of e-TeX.\MessageBreak
35   It redefines LaTeX's output routine. Therefore\MessageBreak
36   use with care, no warranties%
37 }%
38
39 \ifx\marks\@undefined
40
41   \let\pec@mark\mark
42   \let\pec@value\empty
43   \long\def\mark#1{%
44     \protected\xdef\pec@value{\#1}%
45     \pec@setmark
46   }%
47   \def\pec@setmark{%
48     \begingroup
49       \temptokena\expandafter{\pec@value}%
50       \pec@mark{\{\current@color}\the\temptokena}%
51     \endgroup
52   }%
53   \def\pec@getmark{%
54     \xdef\pec@botcolor{%

```

```

55      \expandafter\@firstofthree\botmark\@empty\@empty\@empty
56      }%
57  }%
58  \long\def\@firstofthree#1#2#3{#1}%
59  \CheckCommand{\@leftmark}[2]{#1}%
60  \CheckCommand{\@rightmark}[2]{#2}%
61  \CheckCommand*\{\@leftmark\}{%
62      \expandafter\@leftmark\botmark\@empty\@empty
63  }%
64  \CheckCommand*\{\@rightmark\}{%
65      \expandafter\@rightmark\firstmark\@empty\@empty
66  }%
67  \long\def\@leftmark#1#2#3{#2}%
68  \long\def\@rightmark#1#2#3{#3}%
69  \g@addto@macro\@leftmark\@empty
70  \g@addto@macro\@rightmark\@empty
71
72 \else
73
74  \RequirePackage{etex}[1998/03/26]%
75  \newmarks\pec@marks
76  \def\pec@setmark{\marks\pec@marks{\currentcolor}}%
77  \def\pec@getmark{\xdef\pec@botcolor{\botmarks\pec@marks}}%
78
79 \fi

```

2.1 \marginpar fix

```

80 \chardef\pec@result\z@
81 \def\pec@temp#1{%
82   \chardef\pec@result\@ne
83   \begingroup
84     \let\on@line\empty
85     \PackageInfo{pdfcolmk}{%
86       Patch for \string\addmarginpar space applied (#1)%
87     }%
88   \endgroup
89 }

```

2.1.1 latex/base/latex.ltx

```

90 \def\pec@addmarginpar{%
91   \next\@marbox\currlist{%
92     \cons\@freelist\@marbox
93     \cons\@freelist\@currbox
94   }\@latexbug
95   \tempcnta\@ne
96   \if@twocolumn
97     \if@firstcolumn
98       \tempcnta\m@ne
99     \fi
100   \else
101     \if@mparswitch
102       \ifodd\c@page
103         \else
104           \tempcnta\m@ne
105         \fi
106       \fi
107       \if@reversemargin \tempcnta -\tempcnta \fi
108     \fi
109     \ifnum\tempcnta < \z@ \global\setbox\@marbox\box\@currbox \fi
110     \tempdima\@parbottom
111     \advance\tempdima -\pageht
112     \advance\tempdima\ht\@marbox

```

```

113 \ifdim\@tempdima >\z@
114   @latex@warning@no@line{Marginpar on page \thepage\space moved}%
115 \else
116   \atempdima\z@
117 \fi
118 \global\@mparbottom\@pageht
119 \global\advance\@mparbottom\@tempdima
120 \global\advance\@mparbottom\dp\@marbox
121 \global\advance\@mparbottom\marginparpush
122 \advance\@tempdima -\ht\@marbox
123 \global\setbox\@marbox\vbox{%
124   \vskip \atempdima
125   \box \@marbox
126 }%
127 \global \ht\@marbox \z@
128 \global \dp\@marbox \z@
129 \kern -\@pagedp
130 \nointerlineskip
131 \hb@xt@\columnwidth{%
132   \ifnum \atempcsta >\z@
133     \hskip\columnwidth
134     \hskip\marginparsep
135   \else
136     \hskip -\marginparsep
137     \hskip -\marginparwidth
138   \fi
139   \box\@marbox \hss
140 }%
141 \nointerlineskip
142 \hbox{\vrule \height\z@ \width\z@ \depth\@pagedp}%
143 }
144 \ifx\pec@addmarginpar\@addmarginpar
145 \pec@temp{latex/base}%
146 \fi

```

2.1.2 memoir.cls

```

147 \def\pec@addmarginpar{%
148   \checkoddpage
149   \next\@marbox\@currlist{%
150     \cons\@freelist\@marbox
151     \cons\@freelist\@currbox
152   }\@latexbug
153   \atempcsta\@ne
154   \iftwocolumn
155     \if@firstcolumn
156       \atempcsta\m@ne
157     \fi
158   \else
159     \if@mparswitch
160       \ifoddpage
161       \else
162         \atempcsta\m@ne
163       \fi
164     \fi
165     \if@reversemargin
166       \atempcsta -\atempcsta
167     \fi
168   \fi
169   \ifnum\atempcsta <\z@
170     \global\setbox\@marbox\box\@currbox
171   \fi
172   \atempdima\@mparbottom
173   \advance\atempdima -\@pageht

```

```

174  \advance\@tempdima\ht\@marbox
175  \ifdim\@tempdima >\z@
176    \@latex@warning@no@line{%
177      Marginpar on page \thepage\space moved by \the\@tempdima
178    }%
179  \else
180    \atempdima\z@
181  \fi
182  \global\@mparbottom\@pageht
183  \global\advance\@mparbottom\@tempdima
184  \global\advance\@mparbottom\dp\@marbox
185  \global\advance\@mparbottom\marginparpush
186  \advance\@tempdima -\ht\@marbox
187  \global\setbox\@marbox\vbox{%
188    \vskip \atempdima
189    \box \@marbox
190  }%
191  \global \ht\@marbox \z@
192  \global \dp\@marbox \z@
193  \kern -\@pagedp
194  \nointerlineskip
195  \hb@xt@\columnwidth{%
196    \ifnum \atempcpta >\z@
197      \hskip\columnwidth
198      \hskip\marginparsep
199    \else
200      \hskip -\marginparsep
201      \hskip -\marginparwidth
202    \fi
203    \box\@marbox
204    \hss
205  }%
206  \nointerlineskip
207  \hbox{\vrule \height\z@ \width\z@ \depth\@pagedp}%
208 }%
209 \ifx\pec@addmarginpar\@addmarginpar
210   \pec@temp{memoir.cls}%
211 \fi

```

2.1.3 poemscol/marn.sty, poemscol/newmarn.sty

```

212 \def\pec@addmarginpar{%
213   \next \@marbox\@currlist{%
214     \cons\@freelist\@marbox
215     \cons\@freelist\@currbox
216   }\@latexbug
217   \global\advance\@par@count\m@ne
218   \ifundefined{@marn@\the\@par@count }{%
219     \atempcpta\one % NO: use original LaTeX logic
220     \if@twocolumn
221       \if@firstcolumn
222         \atempcpta\m@ne
223       \fi
224     \else
225       \if@mparswitch
226         \ifodd\c@page
227           \else
228             \atempcpta\m@ne
229           \fi
230         \fi
231         \if@reversemargin
232           \atempcpta -\atempcpta
233         \fi
234       \fi
235     }%
236   }%
237   \if@mparswitch
238     \ifodd\c@page
239       \else
240         \atempcpta\m@ne
241       \fi
242     \fi
243   \else
244     \if@firstcolumn
245       \atempcpta\m@ne
246     \else
247       \atempcpta -\atempcpta
248     \fi
249   \fi
250   \if@reversemargin
251     \atempcpta -\atempcpta
252   \fi
253   \if@mparswitch
254     \ifodd\c@page
255       \else
256         \atempcpta\m@ne
257       \fi
258     \fi
259   \else
260     \if@firstcolumn
261       \atempcpta\m@ne
262     \else
263       \atempcpta -\atempcpta
264     \fi
265   \fi
266   \if@mparswitch
267     \ifodd\c@page
268       \else
269         \atempcpta\m@ne
270       \fi
271     \fi
272   \else
273     \if@firstcolumn
274       \atempcpta\m@ne
275     \else
276       \atempcpta -\atempcpta
277     \fi
278   \fi
279   \if@mparswitch
280     \ifodd\c@page
281       \else
282         \atempcpta\m@ne
283       \fi
284     \fi
285   \else
286     \if@firstcolumn
287       \atempcpta\m@ne
288     \else
289       \atempcpta -\atempcpta
290     \fi
291   \fi
292   \if@mparswitch
293     \ifodd\c@page
294       \else
295         \atempcpta\m@ne
296       \fi
297     \fi
298   \else
299     \if@firstcolumn
300       \atempcpta\m@ne
301     \else
302       \atempcpta -\atempcpta
303     \fi
304   \fi
305   \if@mparswitch
306     \ifodd\c@page
307       \else
308         \atempcpta\m@ne
309       \fi
310     \fi
311   \else
312     \if@firstcolumn
313       \atempcpta\m@ne
314     \else
315       \atempcpta -\atempcpta
316     \fi
317   \fi
318   \if@mparswitch
319     \ifodd\c@page
320       \else
321         \atempcpta\m@ne
322       \fi
323     \fi
324   \else
325     \if@firstcolumn
326       \atempcpta\m@ne
327     \else
328       \atempcpta -\atempcpta
329     \fi
330   \fi
331   \if@mparswitch
332     \ifodd\c@page
333       \else
334         \atempcpta\m@ne
335       \fi
336     \fi
337   \else
338     \if@firstcolumn
339       \atempcpta\m@ne
340     \else
341       \atempcpta -\atempcpta
342     \fi
343   \fi
344   \if@mparswitch
345     \ifodd\c@page
346       \else
347         \atempcpta\m@ne
348       \fi
349     \fi
350   \else
351     \if@firstcolumn
352       \atempcpta\m@ne
353     \else
354       \atempcpta -\atempcpta
355     \fi
356   \fi
357   \if@mparswitch
358     \ifodd\c@page
359       \else
360         \atempcpta\m@ne
361       \fi
362     \fi
363   \else
364     \if@firstcolumn
365       \atempcpta\m@ne
366     \else
367       \atempcpta -\atempcpta
368     \fi
369   \fi
370   \if@mparswitch
371     \ifodd\c@page
372       \else
373         \atempcpta\m@ne
374       \fi
375     \fi
376   \else
377     \if@firstcolumn
378       \atempcpta\m@ne
379     \else
380       \atempcpta -\atempcpta
381     \fi
382   \fi
383   \if@mparswitch
384     \ifodd\c@page
385       \else
386         \atempcpta\m@ne
387       \fi
388     \fi
389   \else
390     \if@firstcolumn
391       \atempcpta\m@ne
392     \else
393       \atempcpta -\atempcpta
394     \fi
395   \fi
396   \if@mparswitch
397     \ifodd\c@page
398       \else
399         \atempcpta\m@ne
400       \fi
401     \fi
402   \else
403     \if@firstcolumn
404       \atempcpta\m@ne
405     \else
406       \atempcpta -\atempcpta
407     \fi
408   \fi
409   \if@mparswitch
410     \ifodd\c@page
411       \else
412         \atempcpta\m@ne
413       \fi
414     \fi
415   \else
416     \if@firstcolumn
417       \atempcpta\m@ne
418     \else
419       \atempcpta -\atempcpta
420     \fi
421   \fi
422   \if@mparswitch
423     \ifodd\c@page
424       \else
425         \atempcpta\m@ne
426       \fi
427     \fi
428   \else
429     \if@firstcolumn
430       \atempcpta\m@ne
431     \else
432       \atempcpta -\atempcpta
433     \fi
434   \fi
435   \if@mparswitch
436     \ifodd\c@page
437       \else
438         \atempcpta\m@ne
439       \fi
440     \fi
441   \else
442     \if@firstcolumn
443       \atempcpta\m@ne
444     \else
445       \atempcpta -\atempcpta
446     \fi
447   \fi
448   \if@mparswitch
449     \ifodd\c@page
450       \else
451         \atempcpta\m@ne
452       \fi
453     \fi
454   \else
455     \if@firstcolumn
456       \atempcpta\m@ne
457     \else
458       \atempcpta -\atempcpta
459     \fi
460   \fi
461   \if@mparswitch
462     \ifodd\c@page
463       \else
464         \atempcpta\m@ne
465       \fi
466     \fi
467   \else
468     \if@firstcolumn
469       \atempcpta\m@ne
470     \else
471       \atempcpta -\atempcpta
472     \fi
473   \fi
474   \if@mparswitch
475     \ifodd\c@page
476       \else
477         \atempcpta\m@ne
478       \fi
479     \fi
480   \else
481     \if@firstcolumn
482       \atempcpta\m@ne
483     \else
484       \atempcpta -\atempcpta
485     \fi
486   \fi
487   \if@mparswitch
488     \ifodd\c@page
489       \else
490         \atempcpta\m@ne
491       \fi
492     \fi
493   \else
494     \if@firstcolumn
495       \atempcpta\m@ne
496     \else
497       \atempcpta -\atempcpta
498     \fi
499   \fi
500   \if@mparswitch
501     \ifodd\c@page
502       \else
503         \atempcpta\m@ne
504       \fi
505     \fi
506   \else
507     \if@firstcolumn
508       \atempcpta\m@ne
509     \else
510       \atempcpta -\atempcpta
511     \fi
512   \fi
513   \if@mparswitch
514     \ifodd\c@page
515       \else
516         \atempcpta\m@ne
517       \fi
518     \fi
519   \else
520     \if@firstcolumn
521       \atempcpta\m@ne
522     \else
523       \atempcpta -\atempcpta
524     \fi
525   \fi
526   \if@mparswitch
527     \ifodd\c@page
528       \else
529         \atempcpta\m@ne
530       \fi
531     \fi
532   \else
533     \if@firstcolumn
534       \atempcpta\m@ne
535     \else
536       \atempcpta -\atempcpta
537     \fi
538   \fi
539   \if@mparswitch
540     \ifodd\c@page
541       \else
542         \atempcpta\m@ne
543       \fi
544     \fi
545   \else
546     \if@firstcolumn
547       \atempcpta\m@ne
548     \else
549       \atempcpta -\atempcpta
550     \fi
551   \fi
552   \if@mparswitch
553     \ifodd\c@page
554       \else
555         \atempcpta\m@ne
556       \fi
557     \fi
558   \else
559     \if@firstcolumn
560       \atempcpta\m@ne
561     \else
562       \atempcpta -\atempcpta
563     \fi
564   \fi
565   \if@mparswitch
566     \ifodd\c@page
567       \else
568         \atempcpta\m@ne
569       \fi
570     \fi
571   \else
572     \if@firstcolumn
573       \atempcpta\m@ne
574     \else
575       \atempcpta -\atempcpta
576     \fi
577   \fi
578   \if@mparswitch
579     \ifodd\c@page
580       \else
581         \atempcpta\m@ne
582       \fi
583     \fi
584   \else
585     \if@firstcolumn
586       \atempcpta\m@ne
587     \else
588       \atempcpta -\atempcpta
589     \fi
590   \fi
591   \if@mparswitch
592     \ifodd\c@page
593       \else
594         \atempcpta\m@ne
595       \fi
596     \fi
597   \else
598     \if@firstcolumn
599       \atempcpta\m@ne
600     \else
601       \atempcpta -\atempcpta
602     \fi
603   \fi
604   \if@mparswitch
605     \ifodd\c@page
606       \else
607         \atempcpta\m@ne
608       \fi
609     \fi
610   \else
611     \if@firstcolumn
612       \atempcpta\m@ne
613     \else
614       \atempcpta -\atempcpta
615     \fi
616   \fi
617   \if@mparswitch
618     \ifodd\c@page
619       \else
620         \atempcpta\m@ne
621       \fi
622     \fi
623   \else
624     \if@firstcolumn
625       \atempcpta\m@ne
626     \else
627       \atempcpta -\atempcpta
628     \fi
629   \fi
630   \if@mparswitch
631     \ifodd\c@page
632       \else
633         \atempcpta\m@ne
634       \fi
635     \fi
636   \else
637     \if@firstcolumn
638       \atempcpta\m@ne
639     \else
640       \atempcpta -\atempcpta
641     \fi
642   \fi
643   \if@mparswitch
644     \ifodd\c@page
645       \else
646         \atempcpta\m@ne
647       \fi
648     \fi
649   \else
650     \if@firstcolumn
651       \atempcpta\m@ne
652     \else
653       \atempcpta -\atempcpta
654     \fi
655   \fi
656   \if@mparswitch
657     \ifodd\c@page
658       \else
659         \atempcpta\m@ne
660       \fi
661     \fi
662   \else
663     \if@firstcolumn
664       \atempcpta\m@ne
665     \else
666       \atempcpta -\atempcpta
667     \fi
668   \fi
669   \if@mparswitch
670     \ifodd\c@page
671       \else
672         \atempcpta\m@ne
673       \fi
674     \fi
675   \else
676     \if@firstcolumn
677       \atempcpta\m@ne
678     \else
679       \atempcpta -\atempcpta
680     \fi
681   \fi
682   \if@mparswitch
683     \ifodd\c@page
684       \else
685         \atempcpta\m@ne
686       \fi
687     \fi
688   \else
689     \if@firstcolumn
690       \atempcpta\m@ne
691     \else
692       \atempcpta -\atempcpta
693     \fi
694   \fi
695   \if@mparswitch
696     \ifodd\c@page
697       \else
698         \atempcpta\m@ne
699       \fi
700     \fi
701   \else
702     \if@firstcolumn
703       \atempcpta\m@ne
704     \else
705       \atempcpta -\atempcpta
706     \fi
707   \fi
708   \if@mparswitch
709     \ifodd\c@page
710       \else
711         \atempcpta\m@ne
712       \fi
713     \fi
714   \else
715     \if@firstcolumn
716       \atempcpta\m@ne
717     \else
718       \atempcpta -\atempcpta
719     \fi
720   \fi
721   \if@mparswitch
722     \ifodd\c@page
723       \else
724         \atempcpta\m@ne
725       \fi
726     \fi
727   \else
728     \if@firstcolumn
729       \atempcpta\m@ne
730     \else
731       \atempcpta -\atempcpta
732     \fi
733   \fi
734   \if@mparswitch
735     \ifodd\c@page
736       \else
737         \atempcpta\m@ne
738       \fi
739     \fi
740   \else
741     \if@firstcolumn
742       \atempcpta\m@ne
743     \else
744       \atempcpta -\atempcpta
745     \fi
746   \fi
747   \if@mparswitch
748     \ifodd\c@page
749       \else
750         \atempcpta\m@ne
751       \fi
752     \fi
753   \else
754     \if@firstcolumn
755       \atempcpta\m@ne
756     \else
757       \atempcpta -\atempcpta
758     \fi
759   \fi
760   \if@mparswitch
761     \ifodd\c@page
762       \else
763         \atempcpta\m@ne
764       \fi
765     \fi
766   \else
767     \if@firstcolumn
768       \atempcpta\m@ne
769     \else
770       \atempcpta -\atempcpta
771     \fi
772   \fi
773   \if@mparswitch
774     \ifodd\c@page
775       \else
776         \atempcpta\m@ne
777       \fi
778     \fi
779   \else
780     \if@firstcolumn
781       \atempcpta\m@ne
782     \else
783       \atempcpta -\atempcpta
784     \fi
785   \fi
786   \if@mparswitch
787     \ifodd\c@page
788       \else
789         \atempcpta\m@ne
790       \fi
791     \fi
792   \else
793     \if@firstcolumn
794       \atempcpta\m@ne
795     \else
796       \atempcpta -\atempcpta
797     \fi
798   \fi
799   \if@mparswitch
800     \ifodd\c@page
801       \else
802         \atempcpta\m@ne
803       \fi
804     \fi
805   \else
806     \if@firstcolumn
807       \atempcpta\m@ne
808     \else
809       \atempcpta -\atempcpta
810     \fi
811   \fi
812   \if@mparswitch
813     \ifodd\c@page
814       \else
815         \atempcpta\m@ne
816       \fi
817     \fi
818   \else
819     \if@firstcolumn
820       \atempcpta\m@ne
821     \else
822       \atempcpta -\atempcpta
823     \fi
824   \fi
825   \if@mparswitch
826     \ifodd\c@page
827       \else
828         \atempcpta\m@ne
829       \fi
830     \fi
831   \else
832     \if@firstcolumn
833       \atempcpta\m@ne
834     \else
835       \atempcpta -\atempcpta
836     \fi
837   \fi
838   \if@mparswitch
839     \ifodd\c@page
840       \else
841         \atempcpta\m@ne
842       \fi
843     \fi
844   \else
845     \if@firstcolumn
846       \atempcpta\m@ne
847     \else
848       \atempcpta -\atempcpta
849     \fi
850   \fi
851   \if@mparswitch
852     \ifodd\c@page
853       \else
854         \atempcpta\m@ne
855       \fi
856     \fi
857   \else
858     \if@firstcolumn
859       \atempcpta\m@ne
860     \else
861       \atempcpta -\atempcpta
862     \fi
863   \fi
864   \if@mparswitch
865     \ifodd\c@page
866       \else
867         \atempcpta\m@ne
868       \fi
869     \fi
870   \else
871     \if@firstcolumn
872       \atempcpta\m@ne
873     \else
874       \atempcpta -\atempcpta
875     \fi
876   \fi
877   \if@mparswitch
878     \ifodd\c@page
879       \else
880         \atempcpta\m@ne
881       \fi
882     \fi
883   \else
884     \if@firstcolumn
885       \atempcpta\m@ne
886     \else
887       \atempcpta -\atempcpta
888     \fi
889   \fi
890   \if@mparswitch
891     \ifodd\c@page
892       \else
893         \atempcpta\m@ne
894       \fi
895     \fi
896   \else
897     \if@firstcolumn
898       \atempcpta\m@ne
899     \else
900       \atempcpta -\atempcpta
901     \fi
902   \fi
903   \if@mparswitch
904     \ifodd\c@page
905       \else
906         \atempcpta\m@ne
907       \fi
908     \fi
909   \else
910     \if@firstcolumn
911       \atempcpta\m@ne
912     \else
913       \atempcpta -\atempcpta
914     \fi
915   \fi
916   \if@mparswitch
917     \ifodd\c@page
918       \else
919         \atempcpta\m@ne
920       \fi
921     \fi
922   \else
923     \if@firstcolumn
924       \atempcpta\m@ne
925     \else
926       \atempcpta -\atempcpta
927     \fi
928   \fi
929   \if@mparswitch
930     \ifodd\c@page
931       \else
932         \atempcpta\m@ne
933       \fi
934     \fi
935   \else
936     \if@firstcolumn
937       \atempcpta\m@ne
938     \else
939       \atempcpta -\atempcpta
940     \fi
941   \fi
942   \if@mparswitch
943     \ifodd\c@page
944       \else
945         \atempcpta\m@ne
946       \fi
947     \fi
948   \else
949     \if@firstcolumn
950       \atempcpta\m@ne
951     \else
952       \atempcpta -\atempcpta
953     \fi
954   \fi
955   \if@mparswitch
956     \ifodd\c@page
957       \else
958         \atempcpta\m@ne
959       \fi
960     \fi
961   \else
962     \if@firstcolumn
963       \atempcpta\m@ne
964     \else
965       \atempcpta -\atempcpta
966     \fi
967   \fi
968   \if@mparswitch
969     \ifodd\c@page
970       \else
971         \atempcpta\m@ne
972       \fi
973     \fi
974   \else
975     \if@firstcolumn
976       \atempcpta\m@ne
977     \else
978       \atempcpta -\atempcpta
979     \fi
980   \fi
981   \if@mparswitch
982     \ifodd\c@page
983       \else
984         \atempcpta\m@ne
985       \fi
986     \fi
987   \else
988     \if@firstcolumn
989       \atempcpta\m@ne
990     \else
991       \atempcpta -\atempcpta
992     \fi
993   \fi
994   \if@mparswitch
995     \ifodd\c@page
996       \else
997         \atempcpta\m@ne
998       \fi
999     \fi
1000 \else
1001   \if@firstcolumn
1002     \atempcpta\m@ne
1003   \else
1004     \atempcpta -\atempcpta
1005   \fi
1006 \fi
1007 }
```

```

235  }{%
236    \c@tempcnta %      YES: use record from last time to decide side.
237    \c@nameuse{\c@marn@\the\c@mpar@count}%
238    \if@c@reversemargin -\fi \c@ne
239  }%
240  \ifnum\c@tempcnta <\z@
241    \global\setbox\c@marbox\box\c@currbox
242    \global\let\c@marnbottom\c@mparbottoml
243  \else
244    \global\let\c@marnbottom\c@mparbottom
245  \fi
246  \c@tempdima\c@marnbottom \advance\c@tempdima -\c@pageht
247  \advance\c@tempdima\ht\c@marbox
248  \ifdim\c@tempdima >\z@
249    \c@warning{Marginpar on page \thepage\space moved}%
250  \else
251    \c@tempdima\z@
252  \fi
253  \global\c@marnbottom\c@pageht
254  \global\advance\c@marnbottom\c@tempdima
255  \global\advance\c@marnbottom\dp\c@marbox
256  \global\advance\c@marnbottom\marginparpush
257  \advance\c@tempdima -\ht\c@marbox
258  \global\ht\c@marbox\z@
259  \global\dp\c@marbox\z@
260  \vskip -\c@pagedp
261  \vskip\c@tempdima\nointerlineskip
262  \hbox to\columnwidth{%
263    \ifnum \c@tempcnta >\z@
264      \hskip\columnwidth
265      \hskip\marginparsep
266    \else
267      \hskip -\marginparsep
268      \hskip -\marginparwidth
269    \fi
270    \if@c@filesw % record where this is for use next time:
271      \c@marn@\log\c@mpar@count
272    \fi
273    \box\c@marbox
274    \hss
275  }%
276  \nobreak %% RmS 91/06/21 \nobreak added
277  \vskip -\c@tempdima
278  \nointerlineskip
279  \hbox{\vrule \c@height\z@ \c@width\z@ \c@depth\c@pagedp}%
280 }
281 \ifx\pec\addmarginpar\addmarginpar
282   \pec\c@temp{poemscol/(new)marn.sty}%
283 \fi

```

2.1.4 refman/refart.cls, refnam/refrep.cls

```

284 \def\pec\addmarginpar{%
285   \c@next\c@marbox\c@currlist{%
286     \c@cons\c@freelist\c@marbox
287     \c@cons\c@freelist\c@currbox
288   }\c@latebug
289   \c@tempcnta\c@ne
290   \if@twocolumn
291     \if@firstcolumn
292       \c@tempcnta\m@ne
293     \fi
294   \else
295     \c@tempcnta\m@ne
296   \fi
297 }
```

```

296  \fi
297  \ifnum\@tempcnta <\z@
298   \global\setbox\@marbox\box\@currbox
299  \fi
300  \tempdima\@parbottom
301  \advance\tempdima -\pageht
302  \advance\tempdima\ht\@marbox
303  \ifdim\tempdima >\z@
304   @@warning{Marginpar on page \thepage\space moved}%
305  \else
306   \tempdima\z@
307  \fi
308  \global\@parbottom\pageht
309  \global\advance\@parbottom\tempdima
310  \global\advance\@parbottom\dp\@marbox
311  \global\advance\@parbottom\marginparpush
312  \advance\tempdima -\ht\@marbox
313  \global\setbox\@marbox\vbox{%
314   \vskip \tempdima \box\@marbox
315  }%
316  \global\ht\@marbox \z@
317  \global\dp\@marbox \z@
318  \kern -\pagedp
319  \nointerlineskip
320  \hbox@\columnwidth{%
321   \ifnum\@tempcnta >\z@
322   \hskip\columnwidth
323   \hskip\marginparsep
324  \else
325   \hskip -\marginparsep
326   \hskip -\marginparwidth
327  \fi
328  \box\@marbox
329  \hss
330  }%
331  \nointerlineskip
332  \hbox{\vrule \height\z@ \width\z@ \depth\pagedp}%
333 }
334 \ifx\pec\addmarginpar\addmarginpar
335 \pec@temp{ref(art|rep).cls}%
336 \fi
337
338 \ifcase\pec@result
339  \PackageInfo{pdfcolmk}{%
340   Fix for \string\addmarginpar\space is omitted, %
341   because this variant\MessageBreak
342   of \string\addmarginpar\space
343   is not recognized}%
344  }%
345 \else
346  % apply patch for \addmarginpar
347  \def\pec@PatchAddMarginpar#1\columnwidth#2#3\@nil{%
348   \pec@PatchAddMarginparI#2\@nil{#1}{#3}%
349  }%
350  \def\pec@PatchAddMarginparI#1\box\@marbox\hss#2\@nil#3#4{%
351   \def\@addmarginpar{%
352     #3%
353     \columnwidth{%
354       #1%
355       \pdfliteral{q}%
356       \rlap{%
357         \box\@marbox

```

```

358      }%
359      \pdfliteral{Q}%
360      \hss
361      #2%
362      }%
363      #4%
364      }%
365  }%
366  \expandafter\pec@PatchAddMarginpar\@addmarginpar\@nil
367 \fi

```

2.2 Color fix

```

368 \def\set@color{%
369   \pdfliteral{\current@color}%
370   \ifinner
371   \else
372     \pec@setmark
373   \fi
374   \aftergroup\reset@color
375 }
376 \def\reset@color{%
377   \pdfliteral{\current@color}%
378   \ifinner
379   \else
380     \pec@setmark
381   \fi
382 }
383
384 \let\pec@botcolor\current@color
385
386 \def\pec@PatchVBoxCCLV{%
387   \ifx\pec@botcolor\@empty
388   \else
389     \setbox\@cclv\vbox{%
390       \pdfliteral{\pec@botcolor}%
391       \unvbox\@cclv
392     }%
393   \fi
394   \pec@getmark
395 }
396
397 \def\pec@PatchAlreadyInBox{%
398   \ifx\pec@botcolor\@empty
399   \else
400     \pdfliteral{\pec@botcolor}%
401   \fi
402   \pec@getmark
403 }
404
405 \@ifclassloaded{memoir}{%
406   \expandafter\def\expandafter\mem@makecol\expandafter{%
407     \expandafter\pec@PatchVBoxCCLV
408     \mem@makecol
409   }%
410   \endinput
411 }{}%
412
413 \@ifclassloaded{seminar}{%
414   \newcommand\pec@org@makeslide{}%
415   \let\pec@org@makeslide\@makeslide
416   \def\@makeslide{%
417     \pec@PatchVBoxCCLV

```

```

418     \pec@org@makeslide
419   }%
420   \endinput
421 }{%
422
423 \long\def\pec@output#1{@specialoutput\else#2\pec@end{%
424   \begingroup
425   \def\x{\#2}%
426   \expandafter\endgroup
427   \ifx\x\empty
428     \PackageWarningNoLine{pdfcolmk}{%
429       Unexpected \string\output\space routine detected,%
430       \MessageBreak
431       loading of package stopped%
432     }%
433     \expandafter\endinput
434   \fi
435 }
436 \expandafter\expandafter\expandafter\pec@output
437 \expandafter\@firstofone\the\output{@specialoutput\else\pec@end
438
439 \long\def\pec@output#1{@specialoutput\else#2\pec@end{%
440   \output{%
441     #1@specialoutput\else
442     \pec@PatchVBoxCCLV
443     #2%
444   }%
445 }
446 \expandafter\expandafter\expandafter\pec@output
447 \expandafter\@firstofone\the\output\pec@end
448 </package>

```

3 Installation

3.1 Download

Package. This package is available on CTAN¹:

CTAN:macros/latex/contrib/oberdiek/pdfcolmk.dtx The source file.

CTAN:macros/latex/contrib/oberdiek/pdfcolmk.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

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.

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
```

¹[ftp://ftp.ctan.org/tex-archive/](http://ftp.ctan.org/tex-archive/)

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 pdfcolmk.dtx
```

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

```
pdfcolmk.sty → tex/latex/oberdiek/pdfcolmk.sty
pdfcolmk.pdf → doc/latex/oberdiek/pdfcolmk.pdf
pdfcolmk.dtx → source/latex/oberdiek/pdfcolmk.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 (`teTEX`, `mikTEX`, ...) relies on file name databases, you must refresh these. For example, `teTEX` 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 pdfcolmk.pdf unpack_files output .
```

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:

```
\lat\et\instal=y\input{pdfcolmk.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 `pdfLATEX`:

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

4 Catalogue

The following XML file can be used as source for the [TeX 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 `pdfcolmk.xml`.

```
449 (*catalogue)
450 <?xml version='1.0' encoding='us-ascii'?>
451 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
452 <entry datestamp='$Date$' modifier='$Author$' id='pdfcolmk'>
453   <name>pdfcolmk</name>
454   <caption>Improving colour support under pdftex.</caption>
455   <authorref id='auth:oberdiek' />
456   <copyright owner='Heiko Oberdiek' year='2000,2005-2008' />
457   <license type='lpl1.3' />
458   <version number='1.2' />
459   <description>
460     The package provides macros that emulate the &#x2018;colour stack&#x2019;;
461     functionality of dvips. The colour stack deals with colour
462     manipulations when asynchronous events (like page-breaking) occur;
463     pdftex does not (yet) have such a stack, but dvips does, and the
464     <xref refid='color'>color</xref> package makes extensive use of
465     it.
466   <p/>
467   This package is an experimental solution to the problem, and works
468   best with pdf-e-tex.
469   <p/>
470   The package is part of the <xref refid='oberdiek'>oberdiek</xref> bundle.
471 </description>
472 <documentation details='Package documentation'
473   href='ctan:/macros/latex/contrib/oberdiek/pdfcolmk.pdf' />
474 <ctan file='true' path='/macros/latex/contrib/oberdiek/pdfcolmk.dtx' />
475 <miktex location='oberdiek' />
476 <texlive location='oberdiek' />
477 <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip' />
478 </entry>
479 </catalogue>
```

5 History

[2000/08/27 v0.1]

- First published version in newsgroup `comp.text.tex`:
“pdftex: bug with colors?”²

[2000/09/02 v0.2]

- Next try.

[2000/09/02 v0.3]

- Solution without ε -TeX added.

[2000/09/06 v0.4]

- Patch commands added.
- Patch for seminar.cls added.

²Url: <http://groups.google.com/group/comp.text.tex/msg/6f088e69e4085d2c>

[2000/09/06 v0.5]

- Bug fix: initialization of `\pec@value` added.

[2005/06/15 v0.6]

- Support for `\marginpar` added. See thread in [comp.text.tex](#): “Using `\textcolor` and `\marginpar` together”³

[2005/07/09 v0.7]

- Output support added for `memoir`, provided by Lars Madsen.

[2006/02/20 v0.8]

- Code is not changed.
- DTX framework.

[2007/01/01 v1.0]

- If `pdftex.def` >= 2007/01/01 v0.04a is used with `pdfTeX` >= 1.40.0, then package `pdfcolmk` is obsolete.

[2007/04/11 v1.1]

- Line ends sanitized.

[2008/08/11 v1.2]

- Code is not changed.
- URLs updated.

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³Url: <http://groups.google.com/group/comp.text.tex/msg/38ed58f8845a2a4f>

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