

The draftwatermark package^{*}

Sergio Callegari[†]

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Abstract

The `draftwatermark` package extends \LaTeX providing a means to add a textual, light gray watermark on every page or on the first page of a document. Typical usage may consist in writing words such as *DRAFT* or *CONFIDENTIAL* across document pages. The package may remind in some sense `draftcopy` by Dr. Juergen Vollmer, but its implementation is much lighter (as the reduced code footprint shows) and does not rely on postscript specials, making the package fully compatible with $\pdf\LaTeX$. The package depends on `everypage` by the same author.

1 Introduction

This program extends \LaTeX providing a means to add a textual, light gray watermark on every page or on the first page of a document. Typical usage may consist in writing words such as *DRAFT* or *CONFIDENTIAL* across document pages. Typical usage may consist in writing words such as *DRAFT* or *CONFIDENTIAL* across document pages. The package may remind in some sense `draftcopy` by Dr. Juergen Vollmer, but its implementation differs by a few points:

1. Code footprint is much, much smaller (about one order of magnitude smaller), although this does not mean much on modern computers.
2. There is no use of Postscript specials or other driver-dependent tricks, so the package should be compatible with any output driver and with $\pdf\LaTeX$ in particular. Lack of compatibility with $\pdf\LaTeX$ in these days is the biggest pitfall of `draftcopy` and was the first motivation for writing `draftwatermark`.
3. Reduced code footprint comes at some price with regards to features. Many features of `draftcopy` are not supported here, most notably `draftwatermark` has:
 - No automatic selection of the watermark text to use, depending on the language, using translations of the word “DRAFT”. However, this is no big loss, since there is a possibility to set the text to use explicitly, and this leaves the freedom to choose whatever text one happens to prefer, including things that have nothing to do with the word “DRAFT” (e.g., “CONFIDENTIAL”, “FOR YOUR EYES ONLY”, etc.).

^{*}This file (`draftwatermark.dtx`) has version number 1.0, last revised 2006/06/30.

[†]Sergio Callegari can be reached at `sergio.callegari` at `gmail dot com`

- No possibility to put the watermark at the bottom of the page. Watermarks are placed at the center of the page.
- No possibility to selectively activate or deactivate operation depending on the global draft and final options. No possibility to watermark only the first *two* pages of a document. However, it is possible to watermark only the first.

Other features available as options in `draftcopy` (e.g., the possibility of time-stamping the watermark text) can qbe obtained working on the watermark text itself.

4. Dependence on the `everypage` package by the same author.

2 User interface

When loaded, `draftwatermark` sets up a number of defaults (detailed later and modifiable by specific commands) and immediately becomes active. If loaded as

```
\usepackage{draftwatermark}
```

the package sets up itself to put a background text on every page. Alternatively, if loaded as

```
\usepackage[firstpage]{draftwatermark}
```

the package sets up itself to put a background text only on the first page.

2.1 Default behavior and commands to modify it

The package defaults are illustrated in table 1.

Behavior	Default value
Angle at which the watermark text is drawn	45
Lightness of the watermark text (1=white, 0=black)	0.8
Font size of the watermark text	5 cm
Scaling of the watermark text	1.2
Watermark text	DRAFT

Table 1: Package defaults.

With reference to the defaults, note that:

1. the watermark text is always in gray;
2. the watermark font size cannot exceed a maximum value that is about 5 cm.
3. the watermark scale can be any value. Using the default, the word “DRAFT” at 45 uses up all the space on an A4 paper. To have a good looking large text, it is better to enlarge the font size as much as possible, rather than using a small font size and pumping up the scale.

Behavior	Command affecting it
Angle at which the watermark text is drawn	<code>\SetWatermarkAngle{<real>}</code>
Lightness of the watermark text (1=white, 0=black)	<code>\SetWatermarkLightness{<real>}</code>
Font size of the watermark text	<code>\SetWatermarkFontSize{<lenght>}</code>
Scaling of the watermark text	<code>\SetWatermarkScale{<real>}</code>
Watermark text	<code>\SetWatermarkScale{<text>}</code>

Table 2: Commands affecting the package behavior.

```

\SetWatermarkAngle
\SetWatermarkLightness
\SetWatermarkFontSize
\SetWatermarkScale
\SetWatermarkText

```

Table 2 illustrates the commands used to modify the package behaviour. Note that there is exactly one command per function and that every command takes a single argument.

Observe that the `\SetWatermarkFontSize` command takes a length rather than a simple number. Also observe that multiline textual watermarks can easily be obtained by the `\shortstack` command and that there is the possibility of using an image rather than a text (e.g., a “caution, work in progress” sign, etc.).

Note that once the package is loaded, there is no way to stop it. In order to have textual watermarks that appear only when specific conditions are met, conditionals must be included in the watermarks.

Eventually consider that no special assumption is made on the \LaTeX output driver, so `draftwatermark` should work equally well with \LaTeX and `pdf \LaTeX` . Furthermore, the package should work equally well with the `dvi`, `dvips`, etc. output drivers. Obviously, the final compatibility with the different output drivers depends on the actual code that is placed in the textual watermark.

3 Implementation

Announce the name and version of the package, which requires $\LaTeX 2\epsilon$.

```

1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{draftwatermark}%
3 [2006/06/30 1.0 Put a gray textual watermark on document pages]

```

Require the needed packages. Note that if these are pre-loaded before loading `draftwatermark`, using suitable options to preset behavior for a desired output driver, this is used also here.

```

4 \RequirePackage{everypage}
5 \RequirePackage{graphicx}
6 \RequirePackage{color}

```

```

\if@sc@wm@first Set up the conditional to store whether a watermark is needed only on the first page or
everywhere.

```

```

7 \newif\if@sc@wm@first
8 \@sc@wm@firstfalse

```

Declare the package options.

```

9 \DeclareOption{firstpage}{%
10 \@sc@wm@firsttrue}

```

11 \ProcessOptions

\sc@wm@angle Set up the package defaults.

```
\sc@wm@lightness 12 \newlength\sc@wm@fontsize
\sc@wm@scale      13 %% defaults
\sc@wm@fontsize  14 \def\sc@wm@angle{45}
\sc@wm@text       15 \def\sc@wm@lightness{0.8}
                  16 \def\sc@wm@scale{1}
                  17 \setlength\sc@wm@fontsize{5cm}
                  18 \def\sc@wm@text{DRAFT}
```

\SetWatermarkAngle Set up the commands to modify the behavior.

```
\SetWatermarkLightness 19 \newcommand\SetWatermarkAngle[1]{%
\SetWatermarkFontSize  20 \def\sc@wm@angle{#1}}
\SetWatermarkScale      21 \newcommand\SetWatermarkLightness[1]{%
\SetWatermarkText       22 \def\sc@wm@lightness{#1}}
                        23 \newcommand\SetWatermarkFontSize[1]{%
                        24 \setlength\sc@wm@fontsize{#1}}
                        25 \newcommand\SetWatermarkScale[1]{%
                        26 \def\sc@wm@scale{#1}}
                        27 \newcommand\SetWatermarkText[1]{%
                        28 \def\sc@wm@text{#1}}
```

\sc@watermark The command to draw the watermark... This assumes an origin in the left top corner of the page (and also assumes that \paperwidth and \paperheight are set correctly. There is no need to worry about the horizontal and vertical size that is taken by the watermark object. Note that this is typically a text, but \sc@wm@text may well contain other material, e.g. an \includegraphics directive.

```
29 \newcommand\sc@watermark{%
30 \setlength{\@tempdimb}{.5\paperwidth}%
31 \setlength{\@tempdimc}{-.5\paperheight}%
32 \put(\strip@pt\@tempdimb,\strip@pt\@tempdimc){%
33 \makebox(0,0){\rotatebox{\sc@wm@angle}{%
34 \scalebox{\sc@wm@scale}{%
35 \textcolor[gray]{\sc@wm@lightness}{%
36 \fontsize{\sc@wm@fontsize}{1.2\sc@wm@fontsize}
37 \selectfont
38 \sc@wm@text}}}}}}
```

\sc@wm@print The command to actually *print* the watermark. It is assumed that this is called before any other material is shipped to the page. As such, the origin here is the page origin in Knuthian sense (1 inch down, 1 inch right from the top left corner of the page... First of all, this is changed to the proper top left corner of the page.

```
39 \newcommand\sc@wm@print[1]{%
40 \setbox\@tempboxa\vbox to \z@{%
41 \vskip -1in \moveleft 1in \vbox{%
42 \hbox to \z@{%
43 #1\hss}}\vss}
44 \dp\@tempboxa\z@
45 \box\@tempboxa}
```

Eventually, set up the \sc@wm@print command to be called when needed, using the appropriate *everypage* hook.

```

46 \if@sc@wm@first
47 \AddThispageHook{\sc@wm@print{\sc@watermark}}
48 \else
49 \AddEverypageHook{\sc@wm@print{\sc@watermark}}
50 \fi
51 \endinput

```

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

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\@tempdimb 30, 32	\RequirePackage	. 4–6
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