Manual for `wallpaper.sty` V. 1.10

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1 Introduction

The LaTeXstyle file `wallpaper.sty` has been developed to make life easier for those wishing to add background images (wallpapers) to their documents, presentations or posters. Though a similar functionality is provided by, e.g., `watermark.sty` by Alexander I. Rozhenko and `eso-pic.sty` by Rolf Niepraschk, and indeed the current style file makes use of the latter, some features are not easily created. In particular, tiling of some background texture is quite involved. This style file provides easily used commands to facilitate creating tiled and centered wallpapers, and partial wallpapers in any of the corners (as of version 1.10). To achieve this ease of use, some functionality provided by `eso-pic.sty` cannot be accessed through this package. Users desiring this additional flexibility should refer to the `eso-pic.sty` manual.

2 Installation

Installation of the package only concerns unpacking the archive in a directory of your choice. It is most convenient to unpack the archive in a directory included in the `TEXINPUTS` environment variable (at our institute, in your `.TeX` directory in your home directory). Unpacking is done using the command:

```
tar -xzf wallpaper.tgz
```

3 Commands Provided

This style file provides the following commands:

`\CenterWallPaper`	Centers background image on page, allows scaling to fraction of page width or height, keeps aspect ratio intact.
`\ThisCenterWallPaper`	As above, but only on the current page.
`\TileWallPaper`	Allows tiling of wallpaper of images of any aspect ratio, aspect ratio is not necessarily preserved.
`\ThisTileWallPaper`	As above, but only on the current page.
`\TileSquareWallPaper`	Allows tiling of wallpaper of images, forcing aspect ratio to $1:1$, the user sets the number of tiles over the width of the paper.
`\ThisTileSquareWallPaper`	As above, but only on the current page.

`\ULCornerWallPaper`	Puts background image at the upper left corner of the page, allows scaling to fraction of page width or height, keeps aspect ratio intact.
`\ThisULCornerWallPaper`	As above, but only on the current page.
`\LLCornerWallPaper`	Puts background image at the lower left corner of the page, allows scaling to fraction of page width or height, keeps aspect ratio intact.
`\ThisLLCornerWallPaper`	As above, but only on the current page.
`\URCornerWallPaper`	Puts background image at the upper right corner of the page, allows scaling to fraction of page width or height, keeps aspect ratio intact.
`\ThisURCornerWallPaper`	As above, but only on the current page.
`\LRCornerWallPaper`	Puts background image at the lower right corner of the page, allows scaling to fraction of page width or height, keeps aspect ratio intact.
`\ThisLRCornerWallPaper`	As above, but only on the current page.
`\ClearWallPaper`	Clears the wallpaper.

The `\CenterWallPaper` command has the following syntax:

```
\CenterWallPaper{<scaling>}{<filename>}
```

The scaling parameter defines the size of the desired wallpaper as a fraction of the paper width or height, depending on the aspect ratio of the image specified by the second parameter (no extension need be given), and the aspect ratio of the paper. The command `\ThisCenterWallPaper` has the same syntax.

The `\TileWallPaper` command has the following syntax:

```
\TileWallPaper{<width>}{<height>}{<filename>}
```

The first two parameters define desired width and height of each tile. Note that this may alter the aspect ratio of the image specified by the third parameter. As many tiles as needed to fill the entire page are placed on each page. The command `\ThisTileWallPaper` has the same syntax.

The `\TileSquareWallPaper` command has the following syntax:

```
\TileSquareWallPaper{<number>}{<filename>}
```

In this case the aspect ratio is fixed to $1 : 1$, regardless of the aspect ratio specified by the second parameter. The first parameter specifies how many tiles should be placed along the width of the page. As above, the number of tiles needed to fill the page is determined automatically. The `\ThisTileSquareWallPaper` command has the same syntax.

The `\ULCornerWallPaper` command has the following syntax:

```
\ULCornerWallPaper{<scaling>}{<filename>}
```

The scaling parameter defines the size of the desired wallpaper as a fraction of the paper width or height, depending on the aspect ratio of the image specified by the second parameter (no extension need be given), and the aspect ratio of the paper. All the `\XXCornerWallPaper` and `\ThisXXCornerWallPaper` commands al have the same syntax.

4 Tweaking the Wallpaper Position

Two lengths `\wpXoffset` and `\wpYoffset` may be set to tweak the position of the wallpaper on the page. Some packages and class files do not seem to report the page geometry correctly, which causes problems with the proper centering and tiling of the wallpaper. In a beta version of `wallpaper.sty` it appeared that the manipulation of `\hoffset` by `sciposter.cls` caused problems, which could be solved by setting `\wpXoffset` to `-\hoffset` (which is now the default). The default value of `\wpYoffset` is 0 pt. By using an appropriate `\setlength` or `\addtolength` command any shift in the origin (at lower left-hand side of the page) can be achieved.

5 Dependencies and Conflicts

Style file `wallpaper.sty` requires the following packages:

- `everyshi`
- `eso-pic`
- `calc`
- `graphicx`
- `ifthen`

Most of these packages are either part of the standard LaTeXdistribution or can be obtained from `www.ctan.org`. No conflicts are known at this time. On problem was reported: to make the example work under LaTeX, rather than pdfLaTeX, it is necessary to convert the two .png files to .eps format.