

magicwatermark 宏包¹

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V1.2C

```
\MagicWatermark[
{
  pages = {*},
  content = {P-\thepage},
  style = {shift = {(0.5\textwidth, .5\textheight + \headheight + \headsep)},
  scale = 3, text = cyan, font = \ttfamily}
},
{
  pages = {even},
  style = {scale = 5, text = pink},
  content = {Watermark},
  is append
},
{
  pages = {1},
  style = {text width = 1.7\paperwidth, rotate = 45, align = left, font =
\Large\linespread{1}\selectfont, opacity = .1},
  content = {
    \foreach \x in {0, ..., 500} {Magic Watermark }
  },
  is append
}
]
```

¹<https://github.com/ljguo1020/magicwatermark>

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1 介绍

`magicwatermark` 是一个全新的水印宏包, 在 2022 年 6 月 17 日发布了第一版, 本次更新并不是基于第一版, 而是进行了重构.

`magicwatermark` 基于 `expl3` 宏包, 可以灵活的设置背景或水印.

2 使用

```
\usepackage[<option>]{magicwatermark}
```

`magicwatermark` 有一个宏包选项 `overlay`, 控制水印是否覆盖内容, 默认为 `false`.

与其他同类宏包相比, `magicwatermark` 更注重易用性, 它仅提供了 `\MagicWatermark`, 该命令接受一个参数, 参数由多个 `group` 组成.

```
\MagicWatermark[
  {},
  {},
  ...
]
```

每个 `group` 接受五个键值选项, 用于配置水印的表现形式.

2.1 pages

`pages` 接受一个逗号分割列表, 用于配置水印作用范围, 例如 `pages = {2, 4, 5, 8-10}`, 表示选中页码为第 2, 4, 5, 8, 9, 10 这些页面.

`pages` 共接受 4 种配置规则,

- `*`, 表示所有页面;
- `odd` 和 `even`, 表示奇偶页;
- 范围, 形如 `3-5`, `12-ii`;
- 表达式, 形如 `2X+1`, `2X^2+X+1`, 但是变量必须为 `X`.

这里假定页面总页数为 24 页,

pages 配置规则		
<code>pages = {*}</code>	=>	1, 2, 3, ..., 24
<code>pages = {odd}</code>	=>	1, 3, 5, ..., 23
<code>pages = {1, 3, 5-10}</code>	=>	1, 3, 5, 6, 7, ..., 10
<code>pages = {1-5, 8, 20-ii}</code>	=>	1, 2, ..., 5, 8, 20, 21, ..., 23
<code>pages = {3X + 1}</code>	=>	1, 4, 7, 10, ..., 22

2.2 tikz

`tikz` 用于设置是否将水印内容放置在 `tikz` 的 node 中, 见下文, 可选值为 `true` 和 `false`, 默认为 `true`. 当你需要使用 `tikz` 时, 需要手动加载 `tikz` 宏包.

2.3 content

`content` 用来设置水印的内容, 当 `tikz` 被启用时, 它被放在了 `tikz` 的 node 中, 为此, 想要灵活的设置它, 您需要对 node 有一些了解.

2.4 style

`style` 用于设置容纳水印内容的 node 的样式, 默认为 `inner sep = 0pt`, `outer sep = 0pt`, `opacity = .5`, `align = left`, 当 `tikz` 被禁用时, 它会被忽略.

2.5 is append

`is append` 用于设置是否覆盖当前页已有的水印, 可选值为 `true` 和 `false`, 默认为 `false`.

3 使用案例

为所有页面右上角添加页码

```
% \usepackage{tikz}
% \usepackage[overlay]{magicwatermark}
\MagicWatermark[
{
  pages = {*},
  content = {P-\thepage},
  style = {shift = {(0.5\textwidth, 0.5\textheight + \headheight + \headsep)}},
  scale = 3, text = cyan, font = \ttfamily}
}
```

为偶数页页面中心添加文字 Watermark

```
% \usepackage{tikz}
% \usepackage{magicwatermark}
\MagicWatermark[
{
  pages = {even},
  style = {scale = 5, text = pink},
  content = {Watermark},
  is append
}
```

为第二页到最后一页设置铺满整个页面的文字

```
% \usepackage{tikz}
% \usepackage{magicwatermark}
\MagicWatermark[
{
  pages = {2-i},
  style = {text width = 1.7\paperwidth, rotate = 45, align = left, font =
\Large, opacity = .1},
  content = {
    \foreach \x in {0, ..., 500} {Magic Watermark }
  },
  is append
}
```

```

}
]

```

为奇偶页设置不同水印

```

% \usepackage{tikz}
% \usepackage{magicwatermark}
\MagicWatermark[
{
  pages = {even},
  style = {scale = 8, rotate = 45, text=red, align = center,font =
\linespread{2}\selectfont},
  content = {
    Even MagicWatermark\\
    Even MagicWatermark\\
    Even MagicWatermark\\
    Even MagicWatermark
  }
},
{
  pages = {odd},
  style = {scale = 6, rotate = -45, text = cyan, text width = 1.7\paperwidth,
font = \linespread{1.5}\selectfont, align = center},
  content = {
    \foreach \x in {0,...,5}{
      Odd MagicWatermark
    }
  }
}
]

```

设置图片为水印

```

% \usepackage{tikz}
% \usepackage{magicwatermark}
\MagicWatermark[
{
  pages = {even},
  style = {opacity = 0.3},
  content = {

```

```

        \includegraphics{example-image-a}
    }
},
{
    pages = {odd},
    style = {opacity = .3, rotate=45, text width = 3\paperwidth},
    content = {
        \foreach \x in {0, ..., 20}{
            \foreach \y in {1, 2, 3} {
                \includegraphics{example-image-b}
            } \\
        }
    }
}
]

```

禁用 tikz

```

% \usepackage{magicwatermark}
\def\addhead#1#2{%
    \expandafter\gdef\csname head@content@#1\endcsname{#2}%
}

\def\printhead#1{%
    \csname head@content@#1\endcsname%
}

\addhead{2}{The only way to do great work is to love what you do.}
\addhead{3}{Success is not final, failure is not fatal: It is the courage to
    continue that counts.}
\addhead{4}{In the end, we will remember not the words of our enemies, but the
    silence of our friends.}
\addhead{5}{It does not matter how slowly you go as long as you do not stop.}

\NewDocumentCommand{\mywatermark}{}{\%
    \begin{tikzpicture}[remember picture, overlay]
        \node[yshift = -\headheight - \headsep, text = teal, font = \large] at
            (current page.north) {\printhead{\thepage}};
    \end{tikzpicture}
}

```

```
}  
  
\MagicWatermark[  
  {  
    pages = {2-5},  
    tikz = false,  
    content = \mywatermark  
  }  
]
```

4 版本历史

V1.2A 重构 magicwatermark.

V1.2B 取消了对 everypage 宏包的依赖.

V1.2C 新增了宏包选项 `overlay`, 去掉了 `setup` 规则. 将 `\Magicwatermark` 的参数更改为可选参数.