

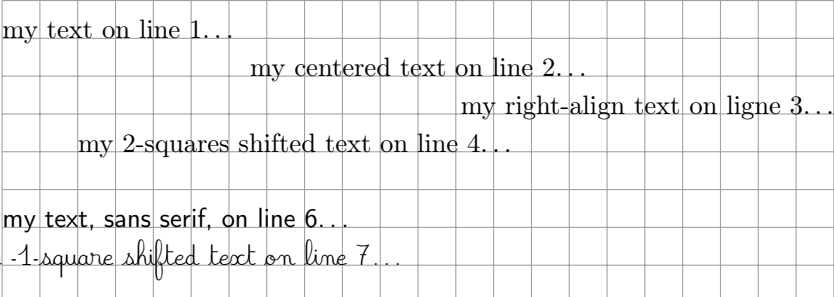
WriteOnGrid [en]

To write on lines
of a grid.

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<https://github.com/cpierquet/WriteOnGrid>

- Some commands to create a grid (5x5 or Seyes) and to write « on » the lines.
- Possibility to personnalize size, margins, ...



my text on line 1...

my centered text on line 2...

my right-align text on ligne 3...

my 2-squares shifted text on line 4...

my text, sans serif, on line 6...

my -1-square shifted text on line 7...



my text on line 1...

my text on line 2...

$1 + \frac{1}{2} = \frac{3}{2}$ et $(1 + x)^2 = 1 + 2x + x^2$ on line 3...

my text on line 4...

L^AT_EX

pdfL^AT_EX

LuaL^AT_EX

TikZ

T_EXLive

MiK_TE_X

Introduction

1 The package

1.1 Loading of the package, used packages

The package `writeongrid` loads within the preamble :

```
\usepackage{writeongrid}
```

Code \LaTeX

It's mostly compatible with `latex`, `pdflatex`, `lualatex` or `xelatex` compilation !

It loads the following packages and libraries :

- `tikz` with the librairies `<calc>` and `<positioning>` ;
- `xstring`, `xparse` and `simplekv`.

1.2 The package itself

The idea is to, thanks to TikZ, propose commands and environment to work with a grid, and to write on the lines.

```
%environment, with keys to prepare the grid
%commands to write or pass a line

\begin{EnvGrid}[keys]<color>
  \WriteLine[keys]<alignment>>{text}
  \PassLine
\end{EnvGrid}
```

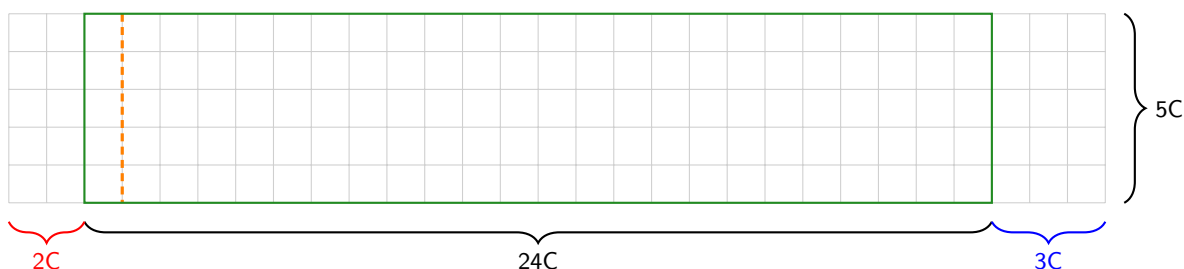
Code \LaTeX

1.3 Overall functioning

The grid is given by the number of squares (`nbCol`×`nbRow`), and after we can adjust with *overtakings* to enlarge the grid onto the margins of the paper (left or right). We can also *adjust* the global margin, to begin the lines differently.

For example, a 5×5 grid :

- with a size 24x5 squares ;
- with an overtaking by 2 squares at the left and 3 squares at the right ;
- with a global margin of 1 square ;
- with a *border* to show the *basis* grid.



The `tikzpicture` is *bounded* by the *border*, in order to specify overtakings or alignment.

Le left-border of the *border* is aligned on the left-margin of the page, so take care of the `\parindent`.

2 Commands, keys and options

2.1 The environnement

%environment, with keys to prepare the grid

Code *LaTeX*

```
\begin{EnvGrid}[keys]<color>
...
\end{EnvGrid}
```

The first argument, *optional*, between [...] give the **(keys)** :

- **(NumSquares)** to specify the size of the grid, under (nbCol)x(nbRow) ; default : **(17x5)**
- **(Unit)** to specify the scale of the grid ; default : **(1)**
- **(Margin)** to specify the global **margin** at the beginning of the lines ; default : **(0)**
- **(Enlarge)** to specify the squares-overtakings, globally with **LR** or side by side with **L/R** ; default : **(0)**
- the boolean **(Border)** to display the basis border of the grid ; default : **(false)**
- the boolean **(Seyes)** to work with a Seyes grid. default : **(false)**

The second argument, *optional*, between <...> is the major color of the grid, **(lightgray)** by default.

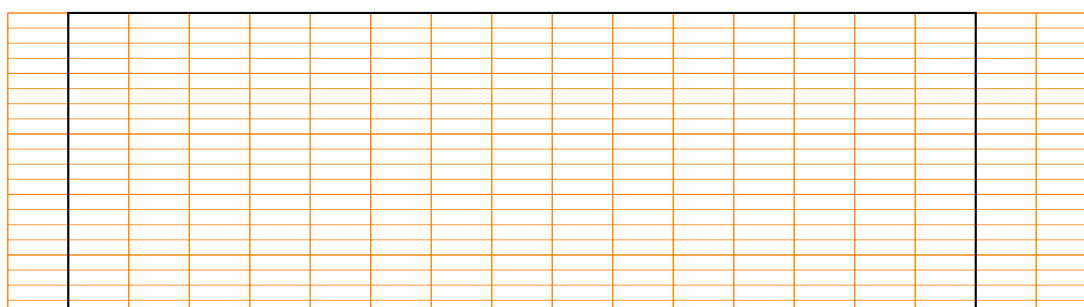
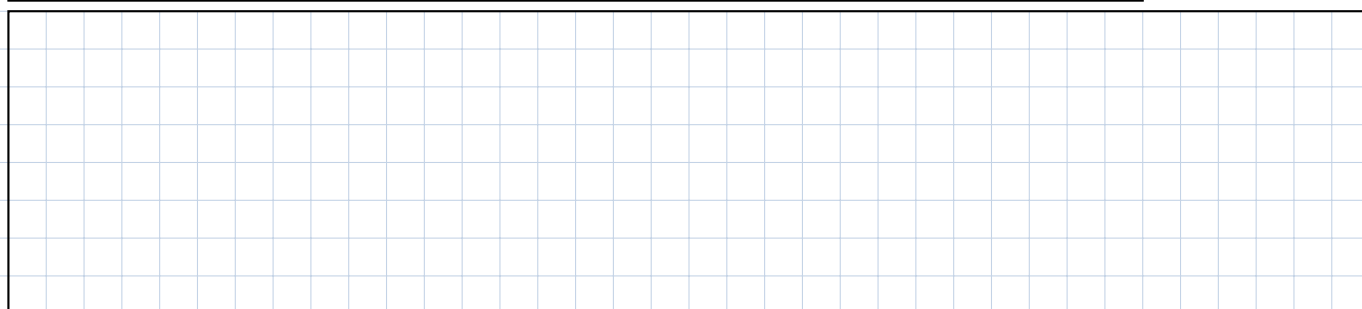
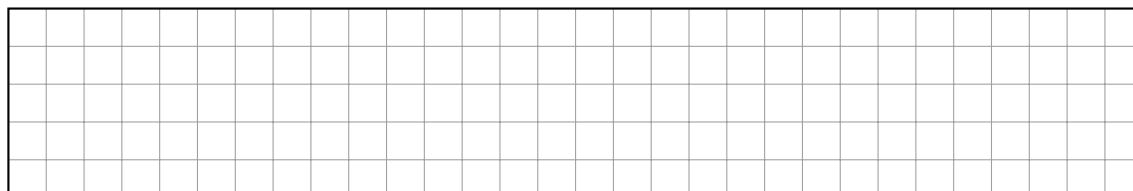
%the borders are added to show the basis grid

Code *LaTeX*

```
%30x5 small squares, w/o overtakings, basis color
\begin{EnvGrid}[NumSquares=30x5]
\end{EnvGrid}

%36x8 small squares, overtakings 3/3, LightSteelBlue color
\begin{EnvGrid}[NumSquares=36x8,Enlarge=3/3]<LightSteelBlue>
\end{EnvGrid}

%15x5 big squares, overtakings 1/2, orange, centered
\begin{center}
  \begin{EnvGrid}[NumSquares=15x5,Enlarge=1/2,Seyes]<orange>
  \end{EnvGrid}
\end{center}
```



2.2 Write on the lines

The idea is to write on the created grid. In order to write *right* on the lines, we can :

- give the lines one by one ;
- avoid using multiline paragraphs, items ;
- pass a line.

Code \LaTeX

```
...
%to write the lines, one by one
\WriteLine[keys]<alignment>{text}
%to pass the ligne
\PassLine
...
```

The first argument, *optional*, between [...] give the **keys** :

- **⟨OffsetH⟩**, in squares, to shift the text from the **margin**; default : **⟨0⟩**
- **⟨OffsetV⟩** to shift vertically the line; default : **⟨0pt⟩**
- **⟨Scale⟩** to specify the scale of the given text. default : **⟨1⟩**

the second argument, *optional*, between `<...>` is the horizontal alignment (`<left/center/right>`) of the text in the basis *border*, `<left>` by default.

Le third argument, *mandatory* and between $\{\dots\}$ is the text, eventually with options.

Code $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$

```
\begin{EnvGrid}[NumSquares=36x8]
  \WriteLine{my text on ligne 1\ldots}
  \WriteLine<center>{\ttfamily my tetetype text centered on line 2\ldots}
  \WriteLine<right>{right-align text on line 3\ldots}
  \WriteLine[OffsetH=0.1]{\textcolor{red}{red text, 1mm-shifted\ldots}}
  \PassLine
  \WriteLine[Scale=0.5]{\sffamily sans serif text, reduced by 50\,\%, on line 6\ldots}
  \WriteLine[OffsetH=3]{\cursive 3 squares-shited text\ldots}
\end{EnvGrid}
```

my text on ligne 1...

```

my tetetype text centered on line 2...

```

right-align text on line 3...

red text, 1mm-shifted...

sans serif text, reduced by 50%, on line 6...

3 square

Code $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$

```
\begin{EnvGrid}[NumSquares=22x4,Margin=1,Enlarge=2/3,Seyes,Border]
  \WriteLine[Scale=1.5]{\textcolor{red}{red text on line 1\ldots}}
  \WriteLine[Scale=1.15,OffsetH=1]{$(1+x)^2=1+2x+x^2$ on line 2, with 1-square offset\ldots}
  \WriteLine[OffsetH=-1]{\textcolor{blue}{blue text, back to left, on line 3\ldots}}
\end{EnvGrid}
```

red text on line 1...

$(1+x)^2 = 1 + 2x + x^2$ on line 2, with 1-square offset...

blue text, back to left, on line 3...

History

v0.1.0 : Initial version