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...

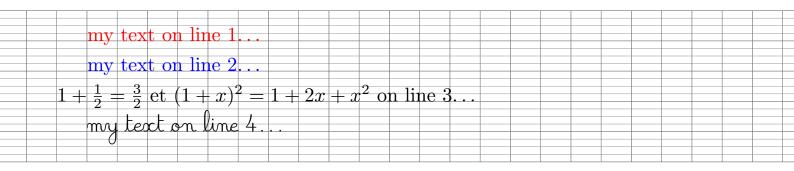
my centered text on line 2...

my right-align text on lighe 3...

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

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

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



MEX

pdfLATEX

LualATEX

TikZ

TEXLive

MiKTEX

Introduction

1 The package

1.1 Loading of the package, used packages

The package writeongrid loads within the preamble :

\usepackage{writeongrid}

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

It loads the following packages and libraries :

- tikz with the librairies (calc) and (positionning);
- 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

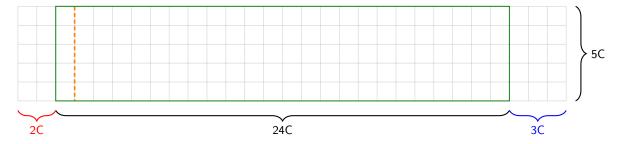
\begin{EnvGrid} [keys] < color >
    \WriteLine [keys] < alignment > {text}
    \PassLine
    \end{EnvGrid}
```

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

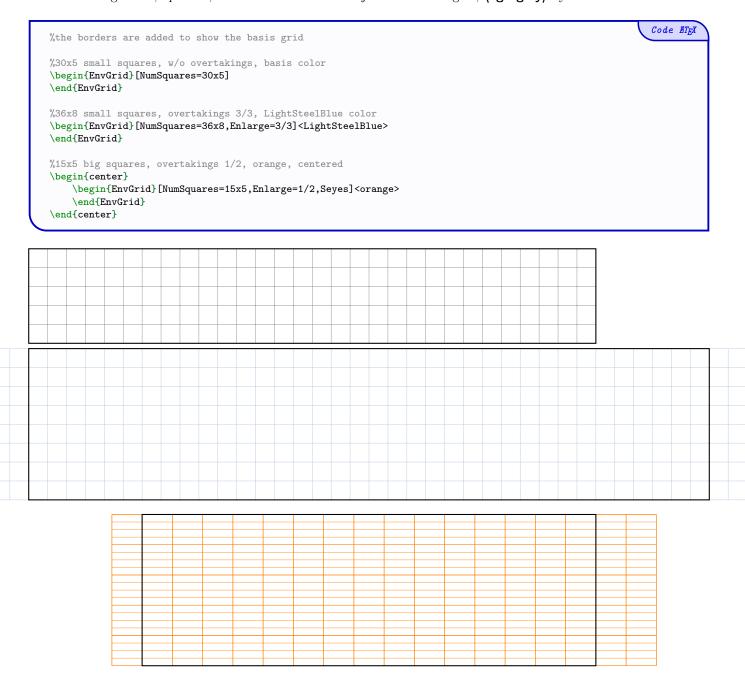
2.1 The environement



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

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

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



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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 multilines paragraps, items;
- pass a line.

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

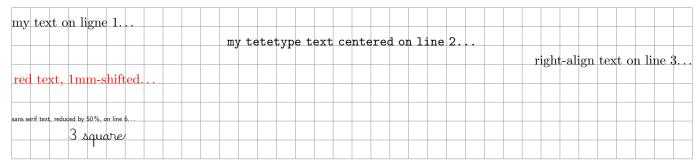
The first argument, optional, between [...] give the **keys**:

- (OffsetH), in squares, to shift the text from the margin; default : (0)
- $\langle \mathsf{OffsetV} \rangle$ to shift vertically the line; default : $\langle \mathsf{Opt} \rangle$
- $\langle Scale \rangle$ to specify the scale of the given text. default : $\langle 1 \rangle$

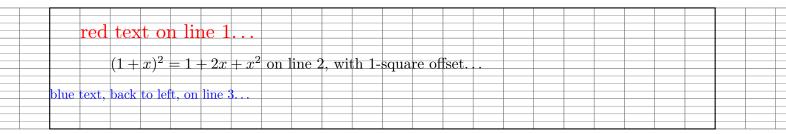
the second argument, optional, between <...> is the horizontal alignment ($\langle left/center/right \rangle$) of the text in the basis border, $\langle left \rangle$ by default.

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

```
\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}
```



```
\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=1.15,0ffsetH=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}
```



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History

v0.1.0: Initial version