

# tikz-layers Package Documentation

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## Abstract

`tikz-layers` is a tiny package that provides, along side “background”, typical graphical layers on TikZ: “behind”, “above” and “glass”.

## 1 Introduction

The PGF/TikZ system provides a layer mechanism, via the commands `\pgfdeclarelayer{<name>}` and `\pgfsetlayers{<layer list>}` to declare new layers and to establish the ordering of all layers, respectively. One typesets graphical material into a specified layer by means of the `{pgfonlayer}` environment. The “backgrounds” TikZ library already provides the “background” layer and styles in order to use it. For more information on these aspects, you should follow the official manual.

The `tikz-layers` package loads the “backgrounds” library and declares three new layers: “behind”, “above” and “glass”. Also, it allows to easily use them by means of styles, within a `{scope}` environment.

## 2 Usage

The logical ordering of the layers declared by this package is: “background” (deepest), “behind”, “main”, “above” and “glass” (highest). Here, the “main” layer is the “normal” layer where the graphic material is drawn if no layer specification is used with PGF/TikZ.

Within a `{scope}` environment, for each of the layers “behind”, “above” and “glass”, a style is available: `on behind layer`, `on above layer` and `on glass layer`, respectively. The material contained in such scope will be drawn in the specified layer. on <name> layer

In the current package version, the functionality regarding the “background” layer is just loaded unchanged from the “backgrounds” library.

The package also provides the style `on layer = layer name`. In fact, the styles mentioned earlier are just shortcuts to the style `on layer = layer name` where the target layer name is given as argument. Therefore, it should be possible to use `tikz-layers` along with manual specification of layers. on layer

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### 3 Example

A hideous (albeit useful, I hope) example is shown below using all the provided layers.

```
\begin{tikzpicture}[
  node distance=-1mm,
  every node/.style={circle, text width=2cm, align=center, node font=\scriptsize}]%

  \node[rectangle, fill=red, minimum height=1cm, opacity=.9, text width=6cm, align=left, outer sep=5mm]
    (main) at (0,0) {main layer};

  \begin{scope}[on glass layer]
    \node[fill=blue!20, above=of main.center] (glass) {glass\\layer};
  \end{scope}

  \begin{scope}[on background layer={fill=yellow!90!black}]
    \fill (main.south west) rectangle (main.north east)
      node [rectangle, anchor=north east, minimum size=0pt] {background};
  \end{scope}

  \begin{scope}[on above layer]
    \node[fill=green!80, below right=of main.center] (above) {above\\layer};
  \end{scope}

  \begin{scope}[on behind layer]
    \node[fill=magenta!90, below left=of main.center] (behind) {behind\\layer};
  \end{scope}

\end{tikzpicture}
```

