A new user interface for the `figchild` package

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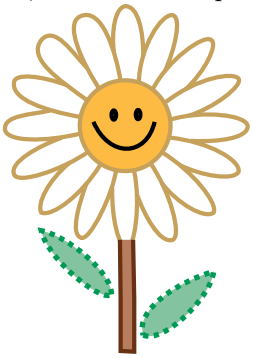
This document describes a new user interface for the `figchild` package.

The new user interface can be used with `\usepackage[v2]{figchild}`. Note the package option `v2`.

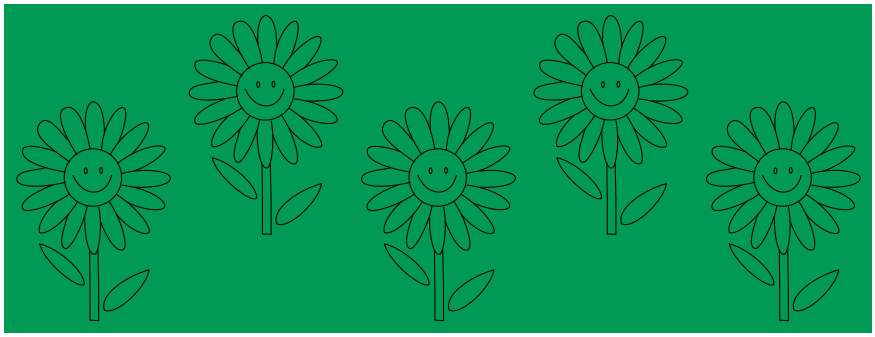
In this case, the macros defined in the file `figchild.sty` take one optional argument which accepts a list of Ti*k*Z keys.

With the old interface, a scale, color and line width have to be given as mandatory arguments. With the new interface, this looks for example as below:

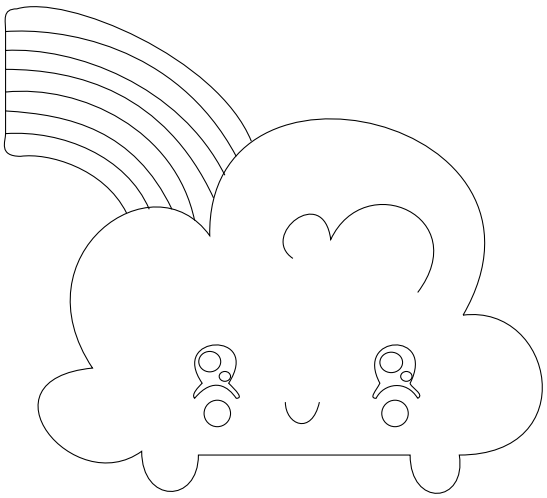
The new interface allows to give different styles for different parts of the figure, as in the example below:



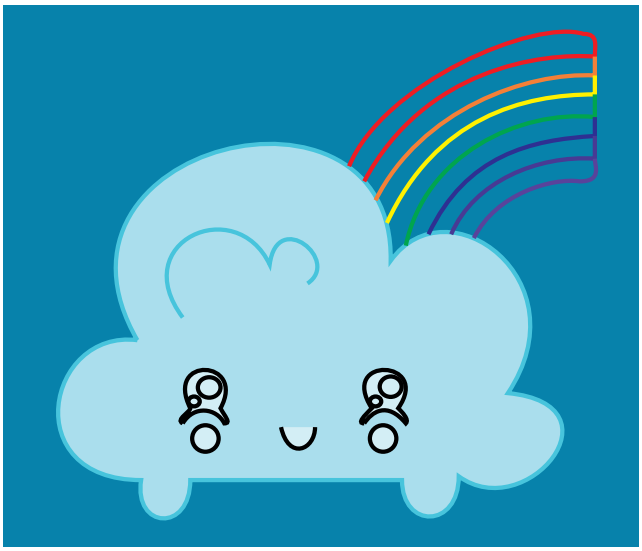
With the old interface, a `figchild` figure was already a `tikzpicture` on its own. This makes it unconvenient to make a picture with several `figchild` figures. With the new interface, a `figchild` figure is not a `tikzpicture` on its own thus it is easier to make a figure such as below:



With the new syntax, it is also very easy to perform transformations on a figure, for example the figure below is mirrored:



Below are 3 more examples of the benefits described above. Note that for `\fcChristmasTree`, the sequence in the code was changed such that the tree is drawn before the christmas balls.



Below are some remarks on the code in the `.sty` file:

1. In the code for `\fcChristmasTree` was the line

   `\draw[draw=#2, line width=#3pt];`.

   Either some drawing instruction was missing or this line can be removed.

2. In the `.sty` file the macros `\imagewidthh`, `\imagescaleh` and `\version` were defined. Hence, a user cannot use these variable names anymore because this will for example give the error

   `LaTeX Error: Command \version already defined.`.

   This can be solved for example by putting `figchild@` in front of these names, such as in the new version of the `.sty` file. The `\version` command does not need to be defined in the `.sty` file but only in the manual.