

# The subfiglist package v1.0

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## Contents

1	Package loading	1
2	The subfiglist environment	3
3	The command <code>\subfiglistfile</code>	5
4	The command <code>\subfiglistlabel</code>	7
5	The command <code>\subfiglistoverlay</code>	8
6	Known issues	11
7	Rough description of the algorithm	12

## 1 Package loading

`\usepackage[options]{subfiglist}`

Options have to be given in a key-value comma separated list as in `key1=val1,key2=val2`. After loading the package, options can also be specified or overwritten with the command `\subfiglistset{options}`. Currently the following options are supported.

**caption** Can be set to `true` or `false` and will be set to `true` when specified completely without value. Default value is `true`. This option cannot be changed after `\begin{document}`.

This option decides whether the interface provided by the `caption` package is used for formatting of the subfigure labels. This interface is powerful, but in order to use it some internal commands of the `caption` package have to be modified. Compatibility

was only tested for version 3.3 of the `caption` package and things may fail for any other version.

Note that this option does *not* decide whether the `caption` package is loaded! The functionality of the `caption` package is used in any case, but because this tweak is considered particularly “dangerous” it can be turned off explicitly.

**environment-width** Length that specifies the default width of the `subfiglist` environment. Default value is `\textwidth`. Shorthand `ew` can be used instead.

**environment-space** Length that specifies the default space between two images in the `subfiglist` environment. Default value is `1ex`. Shorthand `es` can be used instead.

**file-top** Length that specifies the default additional white space above an image in the `subfiglist` environment. Default value is `0pt`. Shorthand `ft` can be used instead.

**file-bottom** Length that specifies the default additional white space below an image in the `subfiglist` environment. Default value is `0pt`. Shorthand `fb` can be used instead.

**file-left** Length that specifies the default additional white space left of an image in the `subfiglist` environment. Default value is `0pt`. Shorthand `fl` can be used instead.

**file-right** Length that specifies the default additional white space right of an image in the `subfiglist` environment. Default value is `0pt`. Shorthand `fr` can be used instead.

**label-hpos** Default horizontal positioning of label within subfigure. Can be either `l` (left), `c` (centered) or `r` (right). Default is `l`. Shorthand `lh` can be used instead.

**label-vpos** Default vertical positioning of label within subfigure. Can be either `t` (top), `c` (centered) or `b` (bottom). Default is `t`. Shorthand `lv` can be used instead.

**label-xshift** Length that specifies the default additional horizontal shift of the label, where positive values shift to the right and negative values to the left, respectively. Default is `0.5ex`. Shorthand `lx` can be used instead.

**label-yshift** Length that specifies the default additional vertical shift of the label, where positive values shift downwards and negative values upwards, respectively. Default is `0.5ex`. Shorthand `ly` can be used instead.

**label-color or label-colour** Default text color of the label. More complex color definitions using e.g. extended color expressions from the `xcolor` package syntax should be enclosed in *double* braces as

```
label-color={{rgb,2:green,0.75;blue,1}}
```

demonstrates. Default color is `.` (period) which means no color change, i.e. current text color. Shorthand `lc` can be used instead.

**label-background** Default background color of the label. As for the `label-color` option, more complex color definitions should be enclosed in *double* braces. Default color is `none`, i.e. fully transparent background. Shorthand `lb` can be used instead.

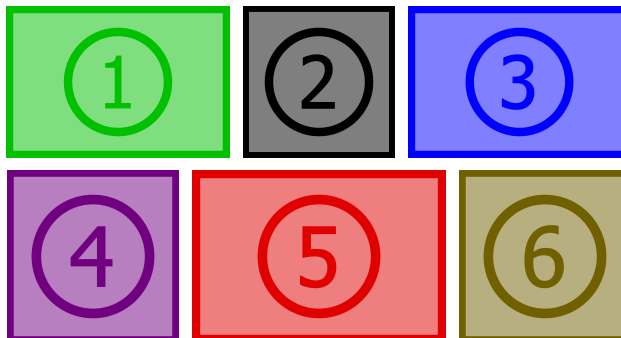
## 2 The *subfiglist* environment

The *subfiglist* environment is used for specification of the desired figure layout and for loading the corresponding files. It is typically used inside a *figure* environment. A first simple example is given in ??.

```

1 \begin{subfiglist}{1 2 3 \ 4 5 6}
2   \subfiglistfile{1}{figures/01.png}
3   \subfiglistfile{2}{figures/02.png}
4   \subfiglistfile{3}{figures/03.png}
5   \subfiglistfile{4}{figures/04.png}
6   \subfiglistfile{5}{figures/05.png}
7   \subfiglistfile{6}{figures/06.png}
8 \end{subfiglist}

```



**Listing 1:** Simple example of *subfiglist* environment usage

In case the *subfiglist* environment is used outside a *figure* or any other float environment, the *caption* package has to be told explicitly that it is supposed to label figures. This can be done with the following command.

```
\captionsetup{type=figure}
```

The *subfiglist* environment serves as a wrapper for several commands, which can be used to specify images, put labels or image overlays. The general syntax is as follows.

```

\begin{subfiglist}[options]{spec}
  content
\end{subfiglist}

```

The commands to be used as *content* are discussed in the subsequent sections. The specification *spec* determines in what layout the subfigures are to be arranged. Within *spec* the following characters are admissible.

**0 to 9** All subfigures are assigned a *number*, which is used as reference later. When *n* subfigures are to be arranged, the specified numbers have to be 1 to *n* with no number appearing twice or being omitted. However, it is not strictly necessary (but recommended) to specify the numbers in ascending order. Any numbers may be enclosed in braces, which is necessary for numbers greater than 9, as any spaces are ignored. Hence, 12 is interpreted as one followed by two, while {12} is interpreted as twelve.