

# 1 Introduction

## 介绍

The package originates from the first edition of my book « $\text{\LaTeX}$ – Einführung in das Textsatzsystem» in about 2006. For the  $\text{\LaTeX}$  examples and tutorials given there, I wanted to have accented and colored boxes to display source code and compiled text in combination. Since, in my opinion, this type of boxes is also quite useful to highlight definitions and theorems, I applied them for my lecture notes in mathematics as well. With this package, you are invited to apply these boxes for similar projects.

该包起源于我在 2006 年左右的《 $\text{\LaTeX}$ – Einführung in das Textsatzsystem》一书的第一版。在书中给出的  $\text{\LaTeX}$  示例和教程中，我希望能将突出和着色的盒子组合起来显示源代码和编译后的文本。我认为这种类型的盒子也非常适用于突出显示定义和定理，因此我在我的数学讲义中也使用了它们。通过这个包，您可以将这些盒子应用于类似的项目。

The breaking news for version 2.00 was the support for breakable boxes. This feature allows new applications of the package without affecting the core package too much if you do not need boxes to break automatically. With version 2.20, the often requested “side by side” mode for listings has been added. With version 3.00, boxed titles are introduced together with improved customization options for overlays, underlays, finishes, and own code extensions.

版本 2.00 的重要更新是添加了盒子的 breakable 支持 (自动换页)。2.20 版，加上了经常被要求加上的，排版代码清单的 “side by side” 模式。在版本 3.00 中，盒标题会和改进了的，用于定制 overlays(覆盖层)、underlays(衬垫)、finishes 和自行扩展的选项一起介绍。

Since the first public release in 2011, I received a lot of feedback from all over the world. I want to thank all who wrote me for supporting this package by sending bug reports and ideas for new or better features.

自 2011 年首次公开发布以来，我收到了来自世界各地的许多反馈。我想感谢所有反馈给我的人，感谢他们通过发送错误报告、和关于新的或更好的功能的想法来支持这个宏包。

## 1.1 Installation

### 安装

Typically, `tcolorbox` will be installed as part of a major  $\text{\LaTeX}$  distribution and there is nothing special to do for a user.

通常，`tcolorbox` 作为  $\text{\LaTeX}$  发行版的一部分进行安装，用户无需做额外操作。

If you intend to make a local installation *by hand*, see the `README` file of the `tcolorbox` package for some hints. The short story is: you have to install not only `tcolorbox.sty`, but also all `*.code.tex` files in the local `texmf` tree.

如果您打算手动进行本地安装，请参阅 `tcolorbox` 包的 `README` 文件以获取一些提示。简而言之，您不仅必须安装 `tcolorbox.sty`，还必须将所有本地 `texmf` 树中的 `*.code.tex` 文件一并安装。

## 1.2 Loading the Package

### 加载包

The base package `tcolorbox` loads the packages `pgf`, `verbatim`, `etoolbox`, and `environ`. `tcolorbox` itself is loaded in the usual manner in the preamble:

基础的 `tcolorbox` 宏包加载了 `pgf`、`verbatim`、`etoolbox` 和 `environ` 这几个宏包。`tcolorbox` 本身可以通过标准的方式在导言区加载：

```
\usepackage{tcolorbox}
```

```
\begin{dispListing}
\usepackage{tcolorbox}
\end{dispListing}
```

上面的样式是这样实现的 (有额外的设置)!

—virhuiai

The package takes option keys in the key-value syntax. For example:

该包的选项采用键-值语法。例如:

```
\usepackage[listings]{tcolorbox}
```

Alternatively, you may use these keys later in the preamble with `\tcbuselibrary` (see there).

你也可以在导言区中通过使用 `\tcbuselibrary` 来设置这些键值。

### 1.3 Libraries 库

The base package `tcolorbox` is extendable by program libraries. This is done by using option keys while loading the package or inside the preamble by applying the following macro with the same set of keys.

基础宏包 `tcolorbox` 可以通过程序库进行扩展。这可以通过在加载包时使用选项键或在导言区应用以下具有相同键集的宏来实现。

```
\begin{docCommand}{tcbuselibrary}{\marg{key list}}
...
\end{docCommand}
```

`docCommand` 环境生成下面的效果哦!

—virhuiai

`\tcbuselibrary{<key list>}`

加载由 `<key list>` 给出的库。

Loads the libraries given by the `<key list>`.

```
\tcbuselibrary{listings,theorems}
```

The following keys are used inside `\tcbuselibrary` respectively `\usepackage` without the key tree path `/tcb/library/`.

以下项 (不含 `/tcb/library/`) 可在 `\tcbuselibrary` 或 `\usepackage` 中使用。

```
\tcbmakedocSubKey{docTcbKey}{tcb}%tcolorbox.doc.s_main.sty
\begin{docTcbKey}[library]{skins}{}{\mylib{skins}}
...
\end{docTcbKey}
```

`docTcbKey` 环境生成下面的效果哦!

—virhuiai

`/tcb/library/skins`



Loads the package `tikz` and provides additional styles (skins) for the appearance of the colored boxes; see Section ?? from page ??.

加载`tikz`宏包,并提供额外的样式(皮肤)用于彩色色盒子的外观;请参见第??节,第??页。

`/tcb/library/vignette` (LIB vignette)

Provides code for more ornamental; see Section ?? from page ??.  
提供更多装饰性代码;请参见第??页的 ??小节。

`/tcb/library/raster` (LIB raster)

Provides additional macros and options for typesetting multiple boxes arranged in a kind of raster; see Section ?? from page ??.  
提供额外的宏和选项排版多个盒子,以一种栅格<sup>1</sup>的形式排列。请参见第??页的 ??小节。

`/tcb/library/listings` (LIB listings)

Loads the package `listings` and provides additional macros for typesetting listings which are described in page ??.  
载入`listings`包,并提供额外的用于代码排版的宏,详见 ??页。

`/tcb/library/listingsutf8` (LIB listingsutf8)

Loads the packages `listings` and `listingsutf8` for UTF-8 support. This is a variant of the library (LIB listings) and is described in page ??.  
载入 `listings` 和用于支持 UTF-8 的 `listingsutf8` 包。这是 (LIB listings) 的一个变体。

`/tcb/library/minted` (LIB minted)

Loads the package `minted` to typeset listings with the `Pygments` tool, also see ?? on page ??.  
加载用 `Pygments` 排版代码的`minted`包。另见?? on page ??。

`/tcb/library/theorems` (LIB theorems)

Provides additional macros for typesetting theorems which are described in page ??.  
为排版定理提供额外的宏,详见 ??页。

`/tcb/library/breakable` (LIB breakable)

Provides support for automatic box breaking from one page to another; see ?? on page ??.  
为盒子提供从一页自动断行到下一页的支持;参见?? on page ??。

`/tcb/library/magazine` (LIB magazine)

Provides support for storing broken box parts to be used later or in interchanged order, ?? on page ??.  
提供支持存储分页盒子的各个部分,以便后续重用或调整顺序,详见?? on page ??。

`/tcb/library/poster` (LIB poster)

Provides support for creating posters, ?? on page ??.  
为创作海报提供支持, ?? on page ??。

`/tcb/library/fitting` (LIB fitting)

Provides support for font size adaption of the box content to the box dimensions; see Section ?? from page ??.  
提供对盒子内的字体大小适应盒子尺寸的支持。详见 ??页的 ??小节。

`/tcb/library/hooks` (LIB hooks)

Extends several option keys to “hookable” keys; see Section ?? from page ??.  
将几个选项键扩展为“hookable”键。详见 ??页的 ??小节。

`/tcb/library/xparse` (LIB xparse)

Provides document command production with `xparse` for `tcolorbox`; see Section ?? from page ??.  
为 `tcolorbox` 提供来自 `xparse` 的文档命令。详见 ??页的 ??小节。

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<sup>1</sup>栅格系统英文为“grid systems”,也有人翻译为“网格系统”,运用固定的格子设计版面布局,其风格工整简洁,在二战后大受欢迎,已成为今日出版物设计的主流风格之一。

**/tcb/library/external** (LIB external)

Provides externalization support for stand-alone document snippets, see ?? on page ??.  
为独立的文档片段提供外部化支持。见?? on page ??。

**/tcb/library/documentation** (LIB documentation)

Provides additional macros for typesetting L<sup>A</sup>T<sub>E</sub>X documentations which are described in Section ?? from page ??.  
为排版 L<sup>A</sup>T<sub>E</sub>X 教程提供额外的宏。详见 ?? 页的 ?? 小节。

**/tcb/library/many** (style, no value)

Loads the libraries LIB skins, LIB breakable, LIB raster, LIB hooks, LIB theorems, LIB fitting, and LIB xparse. Use this shortcut, if you want to use all features of `tcolorbox` with exception of typesetting listings and using the specialized LIB documentation library.

加载 LIB skins、LIB breakable、LIB raster、LIB hooks、LIB theorems、LIB fitting 和 LIB xparse。如果你除了排版代码和使用专门的 LIB documentation 包之外，想使用 `tcolorbox` 的所有功能，请使用这个快捷选项。

**/tcb/library/most** (style, no value)

Loads all libraries except LIB minted and LIB documentation. Use this shortcut, if you want to use all features of `tcolorbox` with exception of using the `minted` package and using the specialized LIB documentation library.

加载除 LIB minted 和 LIB documentation 之外的所有包。如果你想使用 `tcolorbox` 的所有功能，除了使用 LIB minted 和 LIB documentation 包之外，请使用这个快捷选项。

**/tcb/library/all** (style, no value)

Loads all libraries. Use this shortcut only, if you intend to use the LIB documentation library.  
加载所有的包。只有当你打算使用 LIB documentation 包时使用这个快捷选项。

