

The doibanner package

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Abstract

The `doibanner` package allows to generate a banner for a declared DOI. It provides the `\doibanner` macro, which draws the banner using `TikZ` and adds a link via `hyperref`, if desired. Its output might look as follows:



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1 Introduction

I published several documents on *Zenodo*, a general-purpose open repository. They offer to register a DOI for an entry and download a banner of it. The latter can be added to contents foreseen for the entry, or when referring to it.

In order to avoid the manual step of downloading a banner to add to my material, I decided to create a \LaTeX package that draws a comparable banner and includes a link to the corresponding URL. Due to the motivation, the resulting banner is heavily inspired by the design applied in the banner offered by *Zenodo*. It is drawn using the `tikz` package the link is included with `hyperref`.

The application of this package is not limited to *Zenodo* depositions, it can be used to create a banner from a DOI string that can be included in any \LaTeX document.

2 Usage

Load the package in your document's preamble and specify any of the options described in the next subsection as follows:

```
\usepackage[option(s)]{doibanner}
```

*doibanner v0.2 ([source code](#))

2.1 Options

`urlbase=<string>` (default: `https://doi.org/`) specifies the prefix to convert a DOI string into an URL, for normal usecases this does not require any adjustment.

2.2 Macros

The following subsections list the content that can be generated with this package.

doibanner

`\doibanner{<string>}` A DOI banner can be created using the command `\doibanner`, which requires a DOI string as argument. An execution of `\doibanner{xx.xxxx/yyyyy.zzzzzzzz}`, generates the following banner: `DOI xx.xxxx/yyyyy.zzzzzzzz`

`\doibanner*{<string>}` The starred version of the command leads to the same banner, but it does not contain a link to the DOI's URL: `DOI xx.xxxx/yyyyy.zzzzzzzz`

doiurl

`\doiurl{<string>}` An URL is generated by appending the provided *string* to the string defined as the package option `urlbase`. The resulting link is labelled with the DOI string. A call of `\doiurl{xx.xxxx/yyyyy.zzzzzzzz}` results in `xx.xxxx/yyyyy.zzzzzzzz`.

`\doiurl*{<string>}` The command is also available as starred version, which prints the full URL instead of the DOI string and does not include a link. Its output for the aforementioned example will be as follows: `https://doi.org/xx.xxxx/yyyyy.zzzzzzzz`.

3 Implementation

3.1 Dependencies

In order to use `doibanner`, the packages `adjustbox`, `hyperref`, `kvoptions`, `tkiz`, and `xparse` are required as dependencies.

```
1 \RequirePackage{adjustbox}
2 \RequirePackage{hyperref}
3 \RequirePackage{kvoptions}
4 \RequirePackage{tikz}
5 \RequirePackage{xparse}
```

3.2 Options

`\doibanner@urlbase` The package options and are internally available as `\doibanner@<option>`.

```
6 \SetupKeyvalOptions{family=doibanner,prefix=doibanner@}
7 \DeclareStringOption[https://doi.org/]{urlbase}
8 \ProcessKeyvalOptions{doibanner}
```

3.3 Macros

`\doiurl` The *<string>* is appended to the option `urlbase` to generate an URL.

```
9 \NewDocumentCommand\doiurl{s m}{%
10 \IfBooleanTF#1
```

```

11   {\doibanner@urlbase#2}%
12   {\href{\doibanner@urlbase#2}{#2}}%
13 }

```

`\doibanner@draw` Draw the DOI banner including its *(string)*.

```

14 \definecolor{leftcolor}{RGB}{85,85,85}
15 \definecolor{rightcolor}{RGB}{0,126,198}
16 \definecolor{topcolor}{RGB}{59,59,59}
17 \definecolor{bottomtextcolor}{RGB}{60,60,60}
18 \NewDocumentCommand\doibanner@draw{ 0{width=3.6cm} m}{%
19   \adjustbox{#1}{%
20     \begin{tikzpicture}
21       \fill [leftcolor,draw]
22         (1.5,0) --
23         ++(0,.8) {[rounded corners=5] --
24         ++(-1.5,0) --
25         ++(0,-.8)} --
26         cycle
27       {};
28       \node[bottomtextcolor] at (.75,.35) {\fontfamily{\sfdefault}\selectfont\bfseries \Large
29       \node[white] at (.75,.4) {\fontfamily{\sfdefault}\selectfont\bfseries \Large DOI}};
30       \fill [rightcolor,draw]
31         (1.5,0) {[rounded corners=5] --
32         ++(6.5,0) --
33         ++(0,.8)} --
34         ++(-6.5,0) --
35         cycle
36       {};
37       \node[bottomtextcolor] at (4.75,.35) {\fontfamily{\sfdefault}\selectfont\bfseries \Large
38       \node[white] at (4.75,.4) {\fontfamily{\sfdefault}\selectfont\bfseries \Large #2}};
39       \fill [topcolor,draw,opacity=0.1]
40         (0,0) [rounded corners=5] --
41         ++(8,0) --
42         ++(0,.8) --
43         ++(-8,0) --
44         cycle
45       {};
46     \end{tikzpicture}
47     \hspace{-4mm}
48     \vspace{-4mm}
49   }
50 }

```

`\doibanner@draw` Display the DOI banner with or without (*) a link to its URL.

```

51 \NewDocumentCommand\doibanner{s m}{%
52   \IfBooleanTF#1
53   {\doibanner@draw{#2}}%
54   {\href{\doibanner@urlbase#2}{\doibanner@draw{#2}}}%
55 }

56 \endinput

```

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Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in *roman* refer to the code lines where the entry is used.

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General: Initial version	\doibanner@urlbase: Add urlbase option	2
v0.2	\doiurl: Remove trailing whitespace	2
General: Add documentation		1
Convert into dtx		1
Remove \doi macro		2

The [package repository on Codeberg](#) contains a detailed [changelog file](#).