

10 ways to customize toc/lof/lot

9. September 2011 by tom 95 Comments

I put together this list of 10 ways to customize the Table of Contents, List of Figures and List of Tables. Some of them are pretty common, some may be new to you. Hope you enjoy the list...

Some pieces of code below require the `tocloft` package which provides extensive customization functionality for table of contents, list of figures and list of tables. It will be indicated wherever the `tocloft` or any other package needs to be loaded in the preamble.

Note: I will use the abbreviations **toc** for table-of-contents, **lof** for list-of-figures and **lot** for list-of-tables in the article below.

1. Change the lists headings

Change the heading can be done without loading any specific package. Obviously, the name has to be changed before creating the list.

```
1 \renewcommand\contentsname{}
2 \tableofcontents
3 \renewcommand\listfigurename{}
4 \listoffigures
5 \renewcommand\listtablename{}
6 \listoftables
```

2. Add "Page" above page numbers

Several people asked me how to place the word "Page" on top of the page numbers in toc/lof/lot. Here is how you do it:

```
1 \tableofcontents
2 \addtocontents{toc}{~\hfill\textbf{Page}\par}
3 \chapter{...}
```

Contents

	Page
1 Natural Sciences	2
1.1 Biology	2
1.1.1 Molecular biology	3
1.1.2 Cell biology	5
1.1.3 Genetics	6
1.1.4 Developmental biology	6
1.2 Chemistry	6
1.3 Physics	8

"Page" above page numbers

It works the same way with lof and lot. The code was taken from [here](#).

3. Change depth of entries

You can change the depth, i.e. how many levels shall be printed using the respective counter:

```
1 | \setcounter{tocdepth}{1}
2 | \tableofcontents
```

0: chapter (not available for `\documentclass{article}`),

1: section,

2: subsection, etc.

The default depth is 3, subsubsection.

Similarly, including subfigures and subtables can be achieved using:

```
1 | \setcounter{lofdepth}{2}
2 | \setcounter{lotdepth}{2}
```

4. Roman page numbers for toc/lof/lot

To get a different page number style for toc/lof/lot, use:

```
1 | \pagenumbering{}
```

and change it back to `arabic` before the first chapter starts.

Available styles are `arabic`, `roman`, `Roman`, `alph` and `Alph`.

Complete code example:

```
1 | ...
2 | \pagenumbering{roman}
3 | \tableofcontents
4 | \listoffigures
5 | \listoftables
6 | \clearpage
7 | \pagenumbering{arabic}
8 | \chapter{...}
9 | ...
```

5. Hyperlinks to content

Loading the `hyperref` package will let you navigate from toc/lof/lot entries directly to the respective content:

```
1 | \usepackage{hyperref}
```

If you only want the page number to be clickable, you'll need to load the package with the following option:

with the following option:

```
1 | \usepackage[linktocpage=true]{hyperref}
```

6. Adding the lists to toc

Adding entries to toc/lof/lot can be done manually with a single command. Usually, to be sure the page number is correct, it's advisable to add entries directly before or after the actual content to list. And here is how:

```
1 | \addcontentsline{}{}{}
```

The **file** line(s) shall be added (toc, lof or lot), the **type** of the entry (chapter, figure, etc.) and the **entry** text itself.

To add the three lists to the toc use:

```
1 | \tableofcontents
2 | \addcontentsline{toc}{chapter}{Contents}
3 | \listoffigures
4 | \addcontentsline{toc}{chapter}{List of Figures}
5 | \listoftables
6 | \addcontentsline{toc}{chapter}{List of Tables}
```

Contents

Contents	1
List of Figures	2
List of Tables	3
1 Natural Sciences	4
1.1 Biology	4

Adding toc/lof/lot to contents

7. Changing the font of entries

To change the way the actual entries look, you can make use of a command provided by the `tocloft` package. The command will affect the number as well as the text. However, it will not change the page number and the separator (if there are any). The nice thing here is that since it's placed just in front of the sequence number, you can also use it to add words such as “**Chapter** 1: Biology ... Here are a few examples for illustration:

```
1 | \usepackage{tocloft}
2 | \renewcommand{\cftchapfont}{\scshape}
3 | \renewcommand{\cftsecfont}{\bfseries}
4 | \renewcommand{\cftfigfont}{Figure }
5 | \renewcommand{\cfttabfont}{Table }
```

```
5 | \renewcommand{\cfttabfont}{Table }
```

Try it and make sure you don't forget the space behind `Figure_` and `Table_`, otherwise it will be glued to the number.

8. Creating you own list of ...

Again, the `tocloft` package has to be loaded. First, define a new list environment as well as the item which are later being listed. In this case, we are defining **lemmas**, but it could also be proofs, equations, a special list of figures, footnotes, anything. The last line of the lemma command defines how lemmas should be numbered, here “chapter.lemma”.

```
1 | \usepackage{tocloft}
2 | ...
3 | \newcommand{\listlemmaname}{List of Lemmas}
4 | \newlistof{lemma}{lem}{\listlemmaname}
5 | \newcommand{\lemma}[1]{%
6 |   \refstepcounter{lemma}
7 |   \par\noindent\textbf{Lemma \thelemma. #1}
8 |   \addcontentsline{lem}{lemma}
9 |   {\protect\numberline{\thechapter.\thelemma}#1}\par
10 | }
11 | ...
12 | \listoflemma
13 | ...
14 | \lemma{My first lemma}
15 | \label{lem:lemma1}
```

You can find a [complete code example here](#).

9. Alternative text in toc/lof/lot for headings and captions

In case your caption is too long for the lof/lot, you can give it an alternative text. Similarly, the headings can be given an alternative name in the toc:

```
1 | \caption[ ]{}
2 | \chapter[ ]{}

```

10. Chapter specific tocs with minitoc

Finally, `minitoc` produces beautiful tocs at the beginning of every chapter (or any other heading) and therefore, I will dedicate this 10th and last entry to that package:

```
1 | \usepackage{minitoc}
2 | ...
3 | \dominitoc
4 | \tableofcontents
5 | ...
6 | \chapter{...}
7 | \minitoc

```

Chapter 1

Natural Sciences

Chapter 1

Natural Sciences

Contents

1.1	Biology	2
1.1.1	Molecular biology	3
1.1.2	Cell biology	5
1.1.3	Genetics	6
1.1.4	Developmental biology	6
1.2	Chemistry	7
1.3	Physics	8

1.1 Biology

A minitoc example

Here is an [earlier post](#) I wrote about the package as well as the [complete documentation](#).

Wow, that's the longest post I ever wrote. Hope you've enjoyed my list, have fun customizing :-).