Chapter 1

The minitoc package

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1.1 Introduction

This package, initially written by Nigel Ward and Dan Jurafsky, has been almost completely redesigned at ONERA/Centre de Toulouse by Jean-Pierre Drucbert. It creates a mini-table of contents (a "minitoc" 1) at the beginning of each chapter of the document. It is also possible to have a mini-list of figures (a "minilof") and a mini-list of tables (a "minilot"). The document class should of course define chapters (styles like book or report) or sections (styles like article). Thus, this package should not be used with document classes without sectioning commands (like letter). When the document class defines a "part" sectionning level (i.e. classes like book, report and article), you can create a "partial" table of contents (a "parttoc") at the beginning of each part of the document. It is also possible to have a partial list of figures (a "partlof") and a partial list of tables (a "partlot"). When the document class has no \chapter command but has a \section command, you may use section level tables of contents ("secttoc") at the beginning of each section. Note: you cannot use chapter level and section level table of contents in the same document. This restriction is intented to avoid documents full of local tables of contents, list of figures and tables at every sectionning level.



The current version of this package is #30.



Note: the commands relative to the part level are defined only if the document class defines \part. The commands relative to the section level are defined only if the document class does not define \chapter.

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http://www.latex-project.org/lppl.txt

¹The minitoc package introduces its own jargon, explained in this note. It should not be too difficult, however, to learn and use.

and version 1.1 or later is part of all distributions of LaTeX version 1999/06/01 or later.

But please don't bother me about hacked versions.

1.2 Usage

To use the minitoc package, you must introduce a command

\usepackage{minitoc}

in the preamble of your document. The mini-table of contents will appear in the chapter, after the \chapter command, at the point of the \minitoc command. The \minitoc command may occur anywhere inside a chapter. Of course, it is better to put it at the beginning of the chapter, eventually after some introductory material. But you can also decide to put it at the end of the chapter. You should use the same conventions in all chapters. If you want to add the mini-table of contents for a chapter, you must use the sequence given in Table 1.1 For each mini-table of contents, an auxiliary file will be created with a name of the form $\langle document \rangle .mtc \langle N \rangle$, where $\langle N \rangle$ is the absolute chapter number. "Absolute" means that this number is unique, and increasing from the first chapter. The suffix is $.mlf \langle N \rangle$ for mini-lists of figures and is $.mlt \langle N \rangle$ for mini-lists of tables. (If you are under MS-DOS or any operating system with short extensions to filenames, see Section 1.2.3 and Chapter 2, item 5).

The section-level table of contents will appear in the section, after the \section command, at the point of the section command. The \secttoc command may occur anywhere inside a section. Of course, it is better to put it at the beginning of the section, eventually after some introductory material. You should use the same conventions in all sections. If you want to add the section-level table of contents for a section, you must use the sequence given in Table 1.2 For each section-level table of contents, an auxiliary file will be created with a name of the form $\langle document \rangle$. $stc\langle N \rangle$, where $\langle N \rangle$ is the absolute section number. The suffix is $slf\langle N \rangle$ for section-level lists of figures and is $slt\langle N \rangle$ for section-level lists of tables. (If you are under MS-DOS or any operating system with short extensions to filenames, see Section 1.2.3 and Chapter 2, item 5).

Table 1.1: Commands for a minitoc

```
\documentclass[...]{book}
\usepackage{minitoc}
\setcounter{minitocdepth}{2}
                                      default
\setlength{\mtcindent}{24pt}
                                      default
\renewcommand{\mtcfont}{\small\rm}
                                      default
\renewcommand{\mtcSfont}{\small\bf}
                                      default
\begin{document}
\dominitoc
\dominilof
\dominilot
                                      or \faketableofcontents
\tableofcontents
\listoffigures
                                      or \fakelistoffigures
\listoftables
                                      or \fakelistoftables
\chapter{...}
\minitoc
                                      if you want one
\minilof
                                      if you want one
\minilot
                                      if you want one
. . .
```

If you want to add the partial table of contents for a part, you must use the sequence given in Table 1.3. For each partial table of contents, an auxiliary file will be created with a name of the form $\langle document \rangle$.ptc $\langle N \rangle$, where $\langle N \rangle$ is the part number. The suffix is .plf $\langle N \rangle$ for partial lists of figures and is $.plt\langle N \rangle$ for partial lists of tables. (If you are under MS-DOS or any operating system with short extensions to filenames, see Section 1.2.3 and Chapter 2, item 5).



Note: the user is responsible of requiring or not requiring a mini-toc (lof or lot) for some chapter. Asking a minilof for a chapter without any figure will result in an empty and ugly mini list of figures (i.e. the title and two horizontal rules). He is also responsible of requiring or not requiring a partial toc (lof or lot) for some part. Asking a partlof for a part without any figure

Table 1.2: Commands for a secttoc

```
\documentclass[...]{article}
\usepackage{minitoc}
\setcounter{\secttocdepth}{2}
                                       default
\setlength{\stcindent}{24pt}
                                       default
\renewcommand{\stcfont}{\small\rm}
                                       default
\renewcommand{\stcSSfont}{\small\bf}
                                       default
\begin{document}
\dosecttoc
\dosectlof
\dosectlot
                                       or \faketableofcontents
\tableofcontents
\listoffigures
                                       or \fakelistoffigures
\listoftables
                                       or \fakelistoftables
\chapter{...}
\secttoc
                                       if you want one
\sectlof
                                       if you want one
\sectlot
                                       if you want one
. . .
```

will result in an empty and ugly part list of figures (i.e. the title alone on a page). Analogous remarks apply to section-level tables of contents (secttoc, sectlof and sectlot).

By default, the mini-tables and partial tables of contents contain only references to sections and subsections. The minitocdepth and parttocdepth counters, similar to tocdepth, allows the user to modify this behaviour. Mini or partial lists of figures or tables are not affected by the value of these counters.

NOTE: if you are using \chapter* and a



\addcontentsline{toc}{chapter}{...}

Table 1.3: Commands for a parttoc

```
\documentclass[...] {book}
\usepackage{minitoc}
. . .
\setcounter{parttocdepth}{2}
                                           default
\setlength{\ptcindent}{Opt}
                                           default
\renewcommand{\ptcfont}{\normalsize\rm}
                                           default
\renewcommand{\ptcCfont}{\normalsize\bf}
                                           default
\renewcommand{\ptcSfont}{\normalsize\rm}
                                           default
\begin{document}
\doparttoc
\dopartlof
\dopartlot
\tableofcontents
                                           \faketableofcontents
\listoffigures
                                           \fakelistoffigures
\listoftables
                                           \fakelistoftables
\part{...}
\parttoc
                                           if you want one
                                           if you want one
\partlof
\partlot
                                           if you want one
```

command to add something in the table of contents, the numbering of minitoc files would be altered. To avoid that problem, say

```
\addstarredpart{...} \addstarredchapter{...} \addstarredsection{...}
```

These commands apply only for the level of a part-, mini- or sect-toc; for lower levels, use

\addcontentsline{toc}{section}{...}

by example, to add a section-level entry in the toc and the minitoc:

\chapter*{Title of chapter}
\addstarredchapter{Title of chapter}
\minitoc
\section*{First section}
\addcontentsline{toc}{section}{First section}
\section*{Second section}
\addcontentsline{toc}{section}{Second section}

1.2.1 Fonts and Titles

The mini and partial tables and lists are typeset in a verse-like environment, and can be split over pages. The mini-table of contents is typeset in the \mtcfont font, which is \small\rm by default. Section entries are typeset in the \mtcSfont font, which is \small\bf by default. For subsections, subsubsections, paragraphs and subparagraphs, the commands \mtcSSfont, \mtcSSfont, \mtcPfont and \mtcSPfont are available (by default, \small\rm) to enable the use of various fonts. Mini lists of figures and tables are typeset in the fonts \mlffont and \mltfont, which are \small\rm by default.

Titles are typeset in the \mtifont (\large\bf by default) font and the texts of the titles are defined by \mtctitle, \mlftitle and \mlttitle, which are the strings "Contents", "Figures" and "Tables" by default. These commands should be redefined by \renewcommand for languages other than english. The language option files like french.mld and english.mld (and others) are available. You can easily prepare a similar file for your preferred language.

The partial table of contents is typeset in the \ptcfont font, which is defined as \normalsize\rm by default. Chapter entries are typeset in the

²The suffix .mld means "minitoc language definition (file)".

³Most of the strings defined in these language option files were taken from the superb **Babel** system by Johannes Braams and some were adapted, others were offered by gentle users or taken from specific packages, like ArabTEX or vietnam.sty. Other languages are welcome.

\ptcCfont font, which is \normalsize\bf by default. Section entries are typeset in the \ptcSfont font, which is \normalsize\rm by default. For subsections, subsubsections, paragraphs and subparagraphs, the commands \ptcSSfont, \ptcSSSfont, \ptcPfont and \ptcSPfont are available (by default, \normalsize\rm) if you want to use various fonts. Partial lists of figures and tables are typeset in the fonts \mlffont and \mltfont, which are \normalsize\rm by default.

Titles are typeset in the \ptifont (\Huge\bf by default) font and the texts of the titles are defined by \ptctitle, \plftitle and \plttitle, which are the strings "Table of Contents", "List of Figures" and "List of Tables" by default. These commands should be redefined by \renewcommand for languages other than english. The language option files like french.mld and english.mld (and many others, see footnote 3 above) are available. You can easily prepare a similar style for your preferred language.

The section-level table of contents is typeset in the \stcfont font, which is defined as \normalsize\rm by default. Subsection entries are typeset in the \stcSSfont font, which is \normalsize\bf by default. Subsubsection entries are typeset in the \stcSSSfont font, which is \normalsize\rm by default. For subsubsections, paragraphs and subparagraphs, the commands \stcSSSfont, \stcPfont and \stcSPfont are available (by default, \normalsize\rm) if you want to use various fonts. Partial lists of figures and tables are typeset in the fonts \slffont and \sltfont, which are defined as \normalsize\rm by default.

Titles are typeset in the \stifont (\normalsize\bf by default) font and the texts of the titles are defined by \stctitle, \slftitle and \slttitle, which are the strings "Contents", "Figures" and "Tables" by default. These commands should be redefined by \renewcommand for languages other than english. The language option files like french.mld and english.mld (and some others, see footnote 3 above) are available. You can easily prepare a similar style for your preferred language.

By default, titles are on the left. The commands \dominitoc, \dominilof and \dominilot accept an optional argument to change the default position of the corresponding title: [1] for left (default), [c] for center, [r] for right, or [e] (or [n]) for empty (no title). The change is global for all the document.

If you want to change the position of the title for only one minitoc (or minilof or minilof), just use such an optional argument with the command \minitoc (or \minilof or \minilot).

By default, titles are on the left. The commands \doparttoc, \dopartlof and \dopartlot accept an optional argument to change the default position of the corresponding title: [1] for left (default), [c] for center, [r] for right, or [e] (or [n]) for empty (no title). The change is global for all the document.

By default, titles are on the left. The commands \dosecttoc, \dosectlof and \dosectlot accept an optional argument to change the default position of the corresponding title: [1] for left (default), [c] for center, [r] for right, or [e] (or [n]) for empty (no title). The change is global for all the document.

With the commands \tightmtctrue (or the tight package option) and \tightmtcfalse (or the loose package option, which is te default), the minitocs (minilofs, etc.) will have less (tight) or more (loose) space between contents lines.

If you want to change the position of the title for only one secttoc (or sectlof or sectlof), just use such an optional argument with the command \secttoc (or \sectlof or \sectlot).

The mini-tables and lists, as partial and section-level tables and lists, are using some space on the first pages on each chapter, part or section, thus the page numbers are altered. After the first LaTeX run, the mini-tables and lists, partial tables and lists and section-level tables and lists will be empty; after the second run, they appear, but because they modify the page numbering, page numbers are wrong; after the third LaTeX run, the mini, partial and section-level tables and lists should be correct.

1.2.2 Special Features

Horizontal Rules

By default, most of minitocs and siblings have horizontal rules after their titles and at their ends. The exception is the "partoc" in a book- or report-

like document (i.e. when \chapter is defined). To activate or desactivate these rules, the following commands are available:

					defaults	for	
	rules in		no rules in	book	report	article	
\ptcrule	parttocs	\noptcrule	parttocs	N	N	Y	
\mtcrule	minitocs	\nomtcrule	minitocs	\mathbf{Y}	${f Y}$	N-A	
\stcrule	secttocs	\nostcrule	secttocs	N-A	N-A	${f Y}$	

Page Numbers, Leaders

By default, the page numbers are listed in each minitor, minilof, etc. Some authors want only the section titles (with the section numbers), but not the page numbers. Hence the obvious declarations below are available:

Туре	Page numbers (Default)	No page numbers
minitoc	\mtcpagenumbers	\nomtcpagenumbers
secttoc	\stcpagenumbers	\nostcpagenumbers
parttoc	\ptcpagenumbers	\noptcpagenumbers
minilof	\mlfpagenumbers	\nomlfpagenumbers
sectlof	\slfpagenumbers	\noslfpagenumbers
partlof	\plfpagenumbers	\noplfpagenumbers
minilot	\mltpagenumbers	\nomltpagenumbers
sectlot	\sltpagenumbers	\nosltpagenumbers
partlot	\pltpagenumbers	\nopltpagenumbers

In the minitocs and siblings, they are leaders of dots between the section titles and the page numbers. The undotted package option removes these dots. The dotted option is the default.

The "Chapter 0" Problem

Some documents do not begin with chapter number one, but with chapter number zero (or even a weirder number). To make the minitoc package work with such documents, you must insert the command

\firstchapteris $\{\langle N \rangle\}$

before the \dominitoc and analogous commands. $\langle N \rangle$ is the number of your first chapter. This command *does not* modify the numbering of chapters, you must use a \addtocounter{chapter}{-1} command to get a first chapter numbered 0. The \firstpartis and \firstsectionis commands are analogous for parts and sections with a non standard numbering.

Since version #17c, these commands are obsolete, as this problem has been solved. Thus they just give a harmless warning.



1.2.3 Usage with MS-DOS

Under MS-DOS (and other PC oriented operating systems), the filename extensions are limited to 3 characters. The minitoc package determines dynamically the type of extensions available and will use it. All other modifications will be done automatically. The .mtc $\langle N \rangle$ suffix will become .M $\langle N \rangle$, where $\langle N \rangle$ is the absolute chapter number. The suffixes .mlf $\langle N \rangle$ and .mlt $\langle N \rangle$ become .F $\langle N \rangle$ and .T $\langle N \rangle$. The .ptc $\langle N \rangle$ suffix will become .P $\langle N \rangle$, where $\langle N \rangle$ is the part number. The suffixes .plf $\langle N \rangle$ and .plt $\langle N \rangle$ become .G $\langle N \rangle$ and .U $\langle N \rangle$. The .stc $\langle N \rangle$ suffix will become .S $\langle N \rangle$, where $\langle N \rangle$ is the absolute section number. The suffixes .slf $\langle N \rangle$ and .slt $\langle N \rangle$ become .H $\langle N \rangle$ and .V $\langle N \rangle$. Of course, this implies a limit of 99 chapters in a document, but do you really need so many chapters (or sections in an article)? The limit of 99 parts does not seem too serious for most documents. See also Chapter 2, item 5).



1.3 The mtcoff package

When a document has been prepared with the minitoc package, it contains many minitoc specific commands, most of them being \dominitoc, \faketableofcontents, and \minitoc commands (and their equivalents for lists of figures and tables). If you want to typeset this document without any minitable, you have just to replace the minitoc package by the mtcoff package, and all these commands will be ignored. At least two LATEX runs will be necessary to get a correct page numbering and correct cross references.

It also purges the <code>.aux</code>, <code>.toc</code>, <code>.lof</code>, and <code>.lot</code> files from minitoc specific spurious commands.

Table 1.4: Available languages

1.	afrikaan	17.	estonian	34.	polish
	(afrikaans)	18.	ethiopia	35.	portuges
2.	arab (arabic) a		(ethiopian)	36.	romanian
3.	armenian	19.	finnish	37.	russian ^b
4.	bahasa	20.	french (français)		
5.	basque	21.	galician		russianb
6.	bicig	22.	german (austrian)		russianc
7.	brazil	23.	germanb	40.	scottish
	breton	24.	greek	41.	serbian
		25.	irish	42.	slovak
	buryat	26.	italian	43.	slovene
10.	cataran	27	lithuanian	44.	spanish
11.	croatian				swedish
12.	czech	28.	lsorbian	45.	swedish
13.	danish	29.	magyar	46.	turkish
			(hungarian)	47.	ukraineb
14.	dutch	30.	mongol	48.	usorbian
15.	english (american)	31.	ngerman		vietnam
1.0	,	32.	norsk		(vietnamese)
10.	esperant (esperanto)	33.	nynorsk	50.	welsh

^a The arab(ic) language requires the use of ArabTEX.

^b The russian language is not yet supported, but russianb is supported if you use babel-3.6; russianc is an extra.

Chapter 2

Frequently Asked Questions

Here is a list of problems and frequently asked questions about minitoc.sty. If your version has a number less than 30, please upgrade to version #30.

- 1. How avoid a page break near the rules before and after the minitoc?

 This problem seemed solved since version #8, but version #12 adds better fixes.
- 2. How about implementing others layouts for the minitoc? Suggestions are welcome.
- 3. \\ in a contents line makes an error. Use \protect\linebreak.
- 4. If you reorder chapters, havoc follows... minitoes going in wrong chapters.
 - The best way seems to make one run with the mtcoff package replacing the minitoc package, then restore the minitoc package and re-execute LATEX three times (yes, it is time consuming...). Running with the mtcoff package ensures that auxiliary are cleared from "spurious" commands introduced by minitoc.
- 5. This package creates auxiliary files with extensions like .mtc(N). Some operating systems allow only 3 letters extensions. What to do?

 No modification is needed: all is automatic since version #28! If you insist to use 3 characters extensions, even on operating systems allowing more, just use the package option shortext. Then you will get first

the auto-configuration messages, then a message saying that you will however use short extensions.

- 6. Do not cheat with the "chapter" counter, i.e. do not write horrible things like \setcounter{chapter}{6}. The mechanism would break. It is better to add \chapter commands, to create empty (but numbered in a legal way) chapters. Since version #10, minitoc.sty works with appendices. Version #19 allows to begin with a chapter other that number 1.
- 7. Some demanding users want to have minilof, minilot and minibbl. First, minibbl is an other problem, strongly related to the BibTeX's dealing with .aux files. Look at chapterbib.sty, bibunits.sty, multibib.sty, ans bibtopic. Version #13 has implemented basic minilofs and minilots. Minibbls are not the aim of this package.
- 8. This package creates a lot of auxiliary files and some users argue that it is too many. A deep redesign would be necessary to avoid that. Using only one big auxiliary file (or one for all minitors, one for all minilofs, ...) would make the reading of such file very slow, and it would be read for each \miniXXX macro!
- 9. How to do minitocs (minilofs and minilots) at levels other than chapter? Here also, some redesign is needed. From version #15, there are parttocs, partlofs and partlots for the part level in book-like and article-like documents, secttocs, sectlofs and sectlots for the section level in article-like documents. Note that you can not have minitocs features at chapter and section level in the same document, because doing so would make an unreadable monster. The user must choose the main style of the document accordingly to the size of it (e.g. do not write an article of more than 130 sections: this is a report, or even a book!).

	part	chapter	section
book	*	*	
report	*	*	
article	*		*

10. Since version #23, works with document classes resetting chapter (or section) number at each part.