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 #29.

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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[1]The 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 ⟨*document*⟩`.mtc`⟨*N*⟩, where ⟨*N*⟩ is the absolute chapter number. "Absolute" means that this number is unique, and increasing from the first chapter. The suffix is `.mlf`⟨*N*⟩ for mini-lists of figures and is `.mlt`⟨*N*⟩ 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 `secttoc` 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 ⟨*document*⟩`.stc`⟨*N*⟩, where ⟨*N*⟩ is the absolute section number. The suffix is `.slf`⟨*N*⟩ for section-level lists of figures and is `.slt`⟨*N*⟩ 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
\tableofcontents                    or \faketableofcontents
\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 ⟨*document*⟩.ptc⟨*N*⟩, where ⟨*N*⟩ is the part number. The suffix is .plf⟨*N*⟩ for partial lists of figures and is .plt⟨*N*⟩ 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 will result in an empty and ugly part list of figures (i.e. the title alone on a page). Analogous

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
\tableofcontents                       or \faketableofcontents
\listoffigures                         or \fakelistoffigures
\listoftables                          or \fakelistoftables
...
\chapter{...}
\secttoc                               if you want one
\sectlof                               if you want one
\sectlot                               if you want one
...
```

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}{...}

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

Table 1.3: Commands for a parttoc

```
\documentclass[...]{book}
\usepackage{minitoc}
...

\setcounter{parttocdepth}{2}                default
\setlength{\ptcindent}{0pt}                 default
\renewcommand{\ptcfont}{\normalsize\rm}     default
\renewcommand{\ptcCfont}{\normalsize\bf}    default
\renewcommand{\ptcSfont}{\normalsize\rm}    default
...
\begin{document}
...
\doparttoc
\dopartlof
\dopartlot
\tableofcontents                            or
                                            \faketableofcontents
\listoffigures                              or
                                            \fakelistoffigures
\listoftables                               or
                                            \fakelistoftables
...
\part{...}
\parttoc                                     if you want one
\partlof                                     if you want one
\partlot                                     if you want one
...
```

\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, \mtcSSSfont, \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 [2] (and others [3]) 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 \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 fig-

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

[3]Most 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.

Table 1.4: Available languages

1. afrikaan (afrikaans)

2. arab (arabic) [a]

3. armenian

4. bahasa

5. bicig

6. brazil

7. breton

8. buryat

9. catalan

10. croatian

11. czech

12. danish

13. dutch

14. english (american)

15. esperant (esperanto)

16. estonian

17. ethiopia (ethiopian)

18. finnish

19. french (francais)

20. galician

21. german (austrian)

22. germanb

23. greek

24. irish

25. italian

26. lithuanian

27. lsorbian

28. magyar (hungarian)

29. mongol

30. norsk

31. nynorsk

32. polish

33. portuges

34. romanian

35. russian [b]

36. russianb

37. russianc

38. scottish

39. slovak

40. slovene

41. spanish

42. swedish

43. turkish

44. usorbian

45. vietnam (vietnamese)

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[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.

ures 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: `[l]` 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: `[l]` 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: `[l]` 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 mini-tocs (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:

	rules in		no rules in	book	defaults for report	article
\ptcrule	parttocs	\noptcrule	parttocs	**N**	**N**	**Y**
\mtcrule	minitocs	\nomtcrule	minitocs	**Y**	**Y**	**N-A**
\stcrule	secttocs	\nostcrule	secttocs	**N-A**	**N-A**	**Y**

Page Numbers, Leaders

By default, the page numbers are listed in each minitoc, 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:

Type	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{⟨*N*⟩}

before the \dominitoc and analogous commands. ⟨*N*⟩ 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⟨*N*⟩ suffix will become .M⟨*N*⟩, where ⟨*N*⟩ is the absolute chapter number. The suffixes .mlf⟨*N*⟩ and .mlt⟨*N*⟩ become .F⟨*N*⟩ and .T⟨*N*⟩. The .ptc⟨*N*⟩ suffix will become .P⟨*N*⟩, where ⟨*N*⟩ is the part number. The suffixes .plf⟨*N*⟩ and .plt⟨*N*⟩ become .G⟨*N*⟩ and .U⟨*N*⟩. The .stc⟨*N*⟩ suffix will become .S⟨*N*⟩, where ⟨*N*⟩ is the absolute section number. The suffixes .slf⟨*N*⟩ and .slt⟨*N*⟩ become .H⟨*N*⟩ and .V⟨*N*⟩. 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 mini-table, 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 .aux, .toc, .lof, and .lot files from minitoc specific spurious commands.

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 29, please upgrade to version #29.

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... minitocs 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`$\langle N \rangle$. 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. 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 minitocs, 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 part-tocs, 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.