# The aeb-minitoc Package

D. P. Story Email: dpstory@uakron.edu

processed October 3, 2018

#### Contents

1	Description	1
<b>2</b>	Documentation and Code.	2
3	Index	13
4	Change History	15
1	<pre>⟨*package⟩</pre>	

\ifMiniTocListings

nominitocs!nominitocs

The \ifMiniTocListings is a Boolean switch, which when true signals that there is a non-empty listing; otherwise, it is set to false. It is used to display a latex warning to the user that the listing is empty. Also, globally, \ifMiniTocListings is set to false when nominitocs is taken. The other option is !nominitocs is a convenience option; it is not 'not' version of nominitocs; when !nominitocs is specified, mini-tocs are created. This is the same as specifiying no option at all.

- 2 \newif\ifMiniTocListings \MiniTocListingstrue
- 4 \let\insertminitoc\insertminitocNOT}}
- $\label{lem:condition} \begin{tabular}{l} $$ \DeclareOption{!nominitocs}{\MiniTocListingstrue}$ \end{tabular}$
- 6 \ProcessOptions

### 1 Description

A simple mini-toc package; originally designed for web, but now works for all standard IATEX classes. The main user command is \insertminitoc, defined below.

Our approach is to use each entry the \jobname.toc as the first argument of the macro \mtocCL, a second argument keeps a running count on the number of entries.

 $\label{lem:line} $$\operatorname{CL}{\subset Title}_{2}}_{cnt} \ or \mbocCL{\subset Section} $$$ 

 ${\tt \{numberline\{1\}Section\ Title\}\{2\}\{section.1\}\}\{cnt\}}$ 

\contentsline has four arguments when hyperref is loaded and three otherwise. When inserting the full table of contents, we define \def\mtocCL#1#2{#1} to do nothing. When we are building a mini-toc, we \let \mtocCL to \mtoc@CL@mtoc. The effect of this macro is to remove any entry (in \jobname.toc) that does not contain \contentsline as it first token and to position the cnt argument for later use. But by then \contentsline has already been \let to \cl@LOOKFORSEC. Now \cl@LOOKFORSEC determines whether any particular entry should be displayed in the current mini-toc.

#### 2 Documentation and Code.

As a demonstration of this package, we present a mini-toc for this section, which only has \paragraph and \subparagraph section headings.

The verbatim listing for this mini-toc is

```
\TOCLevels{section}{subparagraph}
\begin{minitocfmt}{\minitocFmt}
\declaretocfmt{subparagraph}{\@W{1.5em}\@D{1em}}
\declaretocfmt{subparagraph}{\@W{1.5em}\@D{1em}}
\end{minitocfmt}
\begin{center}\minitocFmt
\fbox{\begin{minipage}{0.8\linewidth}\centering
\textbf{Contents of this section}\vadjust{\kern3pt}%\insertminitoc\relax
\end{minipage}}
\end{center}
```

	Contents of this section			
$\P$	The top and bottom most			3
	$\P\P$ Manually set the top and bottom levels			3
	$\P\P$ Automatically set the top and bottom levels			3
$\P$	$Modify \verb \tableof  fontents$			5
$\P$	$Modify \verb  \addtocontents$			5
$\P$	Modify $\ensuremath{\mbox{\tt Cstartsection}}$ and referencing			6
$\P$	$\verb \insertminitoc: The main command $			7
$\P$	The mini-toc format environment: ${\tt minitocfmt}$ .			8
	$\P\P$ The \declaretocfmt command defined			10
	$\P\P$ The ${\tt minitocfmt}$ environment defined			11

We begin by saving the definitions macros we modify later.

- 7 \let\mtoc@contentsline\contentsline
- ${\bf 8 \setminus let \setminus mtoc@starttoc \setminus @starttoc}$
- 9 \let\mtoc@tableofcontents\tableofcontents
- 10 %\let\mtoc@addtocontents\addtocontents

\@minitocCnt Some counters and utility macros. The counter \@minitocCnt is incremented

\mtocgobble

in the redefined \addtocontents command. The command \mtocgobble is a 'public' version of the core LATEX command \@gobble.

- 11 \newcount\@minitocCnt \@minitocCnt=0\relax
- 12 \def\csarg#1#2{\expandafter#1\csname#2\endcsname}
- 13 \let\mtoc@One=1 \let\mtoc@Zero=0
- 14 \let\mtocgobble\@gobble

¶The top and bottom most. The package assigns the top level and bottom level automatically, based upon the class being used; the document author can override these for the whole document, or for particular mini-tocs. \TOPLevel{\(name\)\} is the name of the top level. It is expected that a mini-toc will be inserted with each top level in the document, as the author's discretion. The \BTMLevel{\(name\)\} is the name of the bottom most level. A mini-toc consists of all sections beneath the top level and above the bottom level. Thus, if \TOPLevel{chapter} and \BTMLevel{subsubsection}, then the mini-toc contans all \section and \subbsection title headings within the current chapter.

\TOPLevel

\TOPLevel

\BTMLevel

¶¶ Manually set the top and bottom levels. \TOPLevel{ $\langle top-level \rangle$ } and \BTMLevel{ $\langle btm-level \rangle$ } are used to determine what entries are to be included in the mini-toc. As a convenience,

\TOCLevels

```
\TOCLevels{\langle top-level \rangle} {\langle btm-level \rangle}
```

can declare both at once. If an argument is empty, the current level is used.

- 15 \def\TOPLevel#1{\def\x{#1}\ifx\x\@empty\else
- $16 $$ \def\mtoc@TOPLevel{#1}\edef\TOPLevelNum{\Omeganameuse{sl@#1}}fi}$
- 17  $\def\BTMLevel#1{\def\x{#1}}\ifx\x\Qempty\else$
- 18 \def\mtoc@BTMLevel{#1}\edef\BTMLevelNum{\@nameuse{sl@#1}}\fi}
- 19 \def\TOCLevels#1#2{\TOPLevel{#1}\BTMLevel{#2}}
- ¶¶ Automatically set the top and bottom levels. We make reasonable choices for book, report, and article; these are the three classes that this package supports. In the course, we define, in macro form, the levels of each of these section names (\sl@(sec-name) and \sl@(sec-name)\*).

```
20 \ensuremath{ \mbox{\tt @ifclassloaded{book}{\tt \mbox{\tt %}}}
    \TOCLevels{chapter}{subsection}
21
     \def\sl@part{-1}\def\sl@chapter{0}
22
    \csarg{\edef}{sl@part*}{\sl@part}
23
    \csarg{\edef}{sl@chapter*}{\sl@chapter}
24
25 }{%
    \@ifclassloaded{report}{%
26
       \TOCLevels{chapter}{subsection}
27
28
       \def\sl@part{-1}\def\sl@chapter{0}
29
       \csarg{\edef}{sl@part*}{\sl@part}
       \csarg{\edef}{sl@chapter*}{\sl@chapter}
30
    ጉ ና %
31
      \TOCLevels{section}{subsubsection}
32
       \def\sl@part{0}\csarg{\edef}{sl@part*}{\sl@part}
33
34
```

```
35 }
36 \def\sl@section{1}\def\sl@subsection{2}\def\sl@subsubsection{3}
37 \def\sl@paragraph{4}\def\sl@subparagraph{5}\%\def\sl@all{17}
38 \csarg{\edef}\{sl@section*}\{\sl@section}
39 \csarg{\edef}\{sl@subsection*}\{\sl@subsection}
40 \csarg{\edef}\{sl@subsubsection*}\{\sl@subsubsection}
41 \csarg{\edef}\{sl@paragraph*}\{\sl@paragraph}
42 \csarg{\edef}\{sl@subparagraph*}\{\sl@subparagraph}
43 \newif\if@foundTOPLevel \@foundTOPLevelfalse
```

\cl@LOOKFORSEC

The command \insertminitoc, just before inputting \jobname.toc, \lets \contentsline to \closure. This command then looks for lines at the top most section level, if it finds one, and the section number matches the one set by \insertminitoc (\mtoc@sec), it sets \if@foundTOPLevel to true, and stores all subsequent lines in \toks@ until another section is encountered, at which time \if@foundTOPLevel is set to false. There are two versions of \cl@LOOKFORSEC: (1) \cl@LOOKFORSEC@LX for when hyperref is not loaded; and (2) \cl@LOOKFORSEC@HY for when hyperref is loaded.

\cl@LOOKFORSEC@LX \cl@LOOKFORSEC@HY

\mtoc@contentsline takes five arguments, we save the page number (#3) the hyperref anchor (#4) and the TOC entry number (#5). The definitions made within \mtoc@contentsline are later \let to \@PgNum, \@L, and \@E. We grab #5, which is the entry count, and pass the rest to \mtoc@contentsline.

```
44 \def\mtoc@@contentsline#1#2#3#4#5{\def\mtoc@PgNum{#3}%
45 \def\mtoc@HY@anchor{#4}\def\TOCEntryNum{#5}%
46 \mtoc@contentsline{#1}{#2}{#3}{#4}}
```

All but the last argument in both of these next two command are the standard arguments for \contentsline. The last argument is one introduced by this package; it keeps the count of the TOC entries. This last argument is used to identify the top level section.

```
47 \long\def\cl@LOOKFORSEC@LX#1#2#3#4{%
    \cl@LOOKFORSEC@HY{#1}{#2}{#3}{\@empty}{#4}}
49 \long\def\cl@LOOKFORSEC@HY#1#2#3#4#5{\def\mt@rgi{#1}% dps
    \if@foundTOPLevel\ifx\mtocCL\@gobbletwo\else
50
        \edef\NUMLevel{\@nameuse{sl@#1}}%
51
52
        \ifnum\NUMLevel > \TOPLevelNum\relax\else
          \let\mtocCL\@gobbletwo
53
        \fi
54
    \fi\fi
55
    \@chkForNl#2\@nil % is it a * section
56
    \ifx\mtocCL\@gobbletwo\else
57
      \edef\mtoc@tmp{\the\mtocs@toks@}%
58
        \ifx\mt@rgi\mtoc@TOPLevel
59
          \def\SECNUM{MTOC.#5}%
60
          \set@display@protect
61
          \edef\mtoc@sec{\mtoc@sec}%
62
          \ifx\SECNUM\mtoc@sec
63
               \@foundTOPLeveltrue
64
          \else
```

```
\@foundTOPLevelfalse\fi
                                       66
                                                                         \set@typeset@protect
                                       67
                                                                   \else
                                       68
                                                                         \if@foundTOPLevel
                                       69
                                                                               \ifnum\NUMLevel > \BTMLevelNum\relax\else
                                       70
                                       71
                                                                                      \ifx\@nlrtn\relax
                                        72
                                                                                             \mtocs@toks@=\expandafter{\mtoc@tmp
                                       73
                                                                                             \mtoc@@contentsline{#1}{#2}{#3}{#4}{#5}}\else
                                                                                             \mtocs@toks@=\expandafter{\mtoc@tmp
                                       74
                                                                                             \mbox{$\mathbb{4}$} 
                                       75
                                                                        \fi
                                       76
                                                                  \fi
                                       77
                                                            \fi
                                       78
                                                     \fi
                                       79
                                       80 }
                                       This version of \mtoc@BTMLevel only accepts lines that are not subsubsection.
                                       81 \@ifpackageloaded{hyperref}{\let\cl@LOOKFORSEC\cl@LOOKFORSEC@HY}
                                                     {\let\cl@LOOKFORSEC\cl@LOOKFORSEC@LX}
\@chkForNl
                                       determines if the first token is \numberline.
                                       83 \def\@chkForNl#1#2\@nil{% check for number line
                                                     \ifx#1\numberline\let\@nlrtn\relax\else
                                                     \def\@nlrtn{\numberline{\hfill}}\fi}
                                        ¶ Modify \tableofcontents
                                       86 \def\mtoc@st@rttoc#1{\begingroup
                                                            \if@filesw \expandafter\newwrite\csname tf@#1\endcsname
                                                            \immediate\openout \csname tf@#1\endcsname \jobname.#1\relax
                                       89
                                                            \fi\global\@nobreakfalse\endgroup}
                                       90 \let\mtoc@@starttoc\mtoc@One
                                       91 \def\mtoc@start@toc{\let\mtoc@start@next\relax
                                                     \@ifundefined{aebLastPage}
                                       92
                                       93
                                                     {%
                                                            \ifx\mtoc@@starttoc\mtoc@One
                                       94
                                                                   \global\let\mtoc@@starttoc\mtoc@Zero
                                       95
                                                                  \def\mtoc@start@next{\mtoc@st@rttoc{toc}}\fi
                                       96
                                                            \mtoc@start@next
                                       97
                                       98
                                                            \ifnum\aebLastPage<\thepage\relax
                                       99
                                     100
                                                                  \def\mtoc@start@next{\mtoc@st@rttoc{toc}}\fi
                                     101
                                                            \mtoc@start@next
                                                    }%
                                    102
                                    103 }
                                     104 \AtEndDocument{\mtoc@start@toc}
```

¶ Modify \addtocontents. (\addtocontents\toc)\{\langle content\rangle\}\) If the document author inserts vertical spacing, or other formatting, that could be problems in the minitoc. So we'll try to remove it. We begin by placing the second argument  $\langle content \rangle$  as the argument of a command, \mtocCL\{\langle content\rangle\}\. Initially,

\mtocCL just passes its argument into the TEX stream. Later, it will be redefined within \insertminitoc.

```
105 \def\mtoc@TOC{toc}
106 \def\mtocCL#1#2{#1}
```

Here, we modify the macro \addtocontents to insert \mtocCL.

```
107 \newcommand\addtocontents@mtoc[2]{%
```

- 108 \def\mt@rgi{#1}\ifx\mt@rgi\mtoc@TOC
- 109 \global\advance\@minitocCnt\@ne
- 110 \mtoc@addtocontents{#1}{\protect\mtocCL{#2}{\the\@minitocCnt}}\else
- 111 \mtoc@addtocontents{#1}{#2}\fi}
- 112 \AtBeginDocument{\let\mtoc@addtocontents\addtocontents
- 113 \let\addtocontents\addtocontents@mtoc}

Modify the \tableofcontents to \mtoc@tableofcontents. We compensate later by executing \mtoc@start@toc at the end of the document.

- 114 \def\tableofcontents{%
- 115 \def\@starttoc##1{\makeatletter
- 116 \@input{\jobname.##1}\makeatother}%
- 117 \NoFmtTOCEntry
- 118 \mtoc@tableofcontents
- 119 \global\let\@starttoc\mtoc@starttoc}

\mtoc@CL@mtoc

\mtoc@CL@mtoc is the redefined version of \mtocCL, as described above. We attempt to see if the first token of its argument is \contentsline, if yes we pass it on, otherwise, we gobble it.

```
120 \newcommand{\mtoc@CL@mtoc}[1]{\mtoc@parse#1\@nil}
```

- $121 \end{area} $$121 \end{area} in $$121 \end{area} $$1$
- 122 \def\mtoc@next##1{#1#2{##1}}\else
- 123 \let\mtoc@next\@gobble\fi\mtoc@next}

¶ Modify \@startsection and referencing. We redefine \@startsection to pick up the first argument (the section name) and define \@currentsecname, which is use in a simple cross referencing system needed for this mini-toc package. This package should be loaded after hyperref for sure.

```
124 \let\@startsection@mtoc@SAVE\@startsection
```

- 125 \def\@startsection#1{\def\@currentsecname{#1}%
- 126 \@startsection@mtoc@SAVE{#1}}

133 \def\mtocref#1{\@nameuse{mtoclbl#1}}

\mtoclabel \mtocref

The use of \mtoclabel and \mtocref are not needed unless you redefine a section heading to a non-numerical value. This system needs a section number.

```
127 \def\mtoclabel#1{\label{#1}\@bsphack
128    \protected@write\@auxout{}{\string
129    \csarg{\string\gdef}{mtoclbl#1}{\the\@minitocCnt}
130  }%
131   \@esphack
132 }
```

\insertminitoc

¶\insertminitoc: The main command. \insertminitoc is the main user command for this package, it places a "minitoc" for a section (\mtoc@TOPLevel) of a document, listing only the subsections within that section. It takes an optional argument for indicating the section number, the subsections of which are to be displayed. The default is the current section, \@nameuse{the\mtoc@TOPLevel}.

\if@minitoc

This Boolean is set to true, in a group, when \insertminitoc is expanded. This is to support a feature for formatting a mini-toc entry; \miniorfulltoc is used for this purpose. \miniorfulltoc is inserted in the optional argument of a section command:

\subsection[\protect \miniorfulltoc{\textbf}{Subsection Entry}]{Subsection Entry}

 $\mbox{miniorfulltoc} {\langle fmt \rangle} {\langle entry \rangle}$  The first argument of \miniorfulltoc is passed to the second entry; for example, {\textbf{Subsection Entry}} as an argument and in a group. Thus, the first argument can be a command with one argument, or a command with not arguments.

```
134 \newif\if@minitoc \@minitocfalse
135 \newif\if@MiniTocListings \@MiniTocListingstrue
136 \def\NoFmtTOCEntry{\@minitocfalse}
137 \def\FmtTOCEntry{\@minitoctrue}
```

138 \def\miniorfulltoc#1#2{\if@minitoc

\let\mtocCL\mtoc@CL@mtoc
\@foundTOPLevelfalse

\let\mtoc@numberline\numberline

153

139 {{#1{#2}}}\else{#2}\fi}

\insertminitoc[\langle label-name \rangle] After the above preliminaries, we get to \insertminitoc. The default value of the optional parameter is MTOC.\the\@minitocCnt; thus, we use the most recent value of \@minitocCnt. An explicit argument is needed when the mini-toc is placed somewhere else (after \minitocCnt has been incremented). You can also say \insertminitoc[\langle label-name \rangle], where \langle label-name \rangle is a label name set by the \mtoclabel command.

```
140 \newcommand{\insertminitoc}[1][]{%
     \def\mtoc@rgi{#1}\ifx\mtoc@rgi\@empty
141
142
       \edef\mtoc@rgi{MTOC.\the\@minitocCnt}\else
143
       \edef\mtoc@rgi{MTOC.\mtocref{#1}}\fi
     \ifnum\TOPLevelNum > \BTMLevelNum
144
       \PackageError{aeb-minitoc}{%
145
146
         The top level (\mtoc@TOPLevel) must be\MessageBreak
147
         must be higher on the hierarchy then at bottom level}
148
         {Try switching the two}\fi
149
     \begingroup
150
     \edef\mtoc@sec{\mtoc@rgi}\mtocs@toks@={}%
\let \contentsline to \cl@LOOKFORSEC
     \let\contentsline\cl@LOOKFORSEC
\let \mtocCL to \mtoc@CL@mtoc
```

Insert formatting ( $\Pg = \sline \Num Fmt$ ) for the page number here.

```
\def\numberline##1{\makebox[\mtoc@numBoxWidth][1]%
155
       {\sl@@sNumFmt{##1}}\sl@@EntryFmt}%
156
     \makeatletter\InputIfFileExists{\jobname.toc}%
157
158
     {\PackageInfo{aeb-minitoc}{TOC file read}}
159
     {\PackageInfo{aeb-minitoc}{TOC file not available}}%
160
     \edef\x{\the\mtocs@toks@}\ifx\x\@empty
       \global\@MiniTocListingsfalse\else
161
162
       \global\@MiniTocListingstrue\fi
```

**Insertion point.** This is where the mini-toc entries are entered into the latex stream to be typeset.

```
163 \the\mtocs@toks@\par\makeatother
164 \if@MiniTocListings\else
165 \PackageWarning{aeb-mintoc}{No mini-toc built here}\fi
166 \endgroup
167 }
```

When the nominitocs option is in effect, we \let the command \insertminitoc \insertminitocNOT to \insertminitocNOT, which absorbs all its arguments.

168 \newcommand{\insertminitocNOT}[1][]{}

\numBoxWidth{\langle length\rangle} The \mtocQnumBoxWidth determines the width of the \hbox that contains the section number. It is conveniently set using \numBoxWidth. The default declaration is \numBoxWidth{2.5em}. The \langle length\rangle should be measured in emunits. Within the minitocfmt, \QW is \let to \numBoxWidth.

```
169 \def\numBoxWidth#1{\def\mtoc@numBoxWidth{#1}}
170 \numBoxWidth{2.5em}
```

In its "raw" expansion, \insertminitoc may not be what you want; in this case, enclose it in some appropriate environment. The following is an example of how to use this command. This can be part of a command that inserts code just after every \section.

```
\begin{center}\minitocFmt
\begin{tabular}{c}\toprule
\begin{minipage}[c]{0.8\linewidth}
\insertminitoc\relax
\end{minipage}\\\bottomrule
\end{tabular}
\end{center}
```

where \minitocFmt is a command that expands to some formatting, see demo files.

¶ The mini-toc format environment: minitocfmt. To help facilitate designing and declaring the mini-toc format, we define the minitocfmt environment. The environment defines a command  $(\langle \c md \rangle)$  that contains all the formatting information for the mini-toc. The body of the environment consists of a series of \declaretocfmt{\langle toc-fmt}\} declarations. Within argument of \declaretocfmt, \@W is an alias for \numBoxWidth and \@D is an alias for \sl@dots. If \@D appears

(@D = @dottedtocline, a dotted line is created in the usual LATEX manner. \@N is an alias \sl@sNumFmt and \@P is an alias for \sl@pNumFmt. All are optional.

 $\ensuremath{\mbox{QA}\{\langle \textit{various}\rangle\}}$  is a command that is not used very often, but is available when needed. The argument  $\langle \textit{various}\rangle$  is various commands to support the mintoc being generated.

pg num box width

dots separation

 $\DS{\langle num \rangle}$  The  $\langle num \rangle$  determines the separation between dots for a TOC entry that uses a dotted rule line. This command is only recognized within the argument of  $\A$ . The default is 4.5.

right margin of title

 $\CR{\langle length\rangle}$  is a convenience command, it takes its argument and defines the LATEX command  $\Command$ , which sets the right margin for the sec-title. The length set by LATEX is 2.55em. The  $\langle length\rangle$  of  $\CR$  should be  $larger\ than\ the\ \langle length\rangle$  set by  $\CR$ .

 $\label{eq:condition} $$ \eccion, etc.) entries.$ 

A 'typical' table of contents entry has the form:

```
\langle sec-num \rangle \langle title-heading \rangle \dots \langle pg-num \rangle
```

Within the  $\langle various \rangle$  argument, there are a number of commands that are recognized:

sec num box width

 $\CW{\langle length\rangle}$  is the width of the box that encloses  $\langle sec-num\rangle$ . Normally, all lengths are measured in em units  $(\CW{\langle num\rangle}em\})$ . The default length is 2.5em

 $use\ dots$ 

 $\ensuremath{\mbox{QD}(\langle \textit{length}\rangle)}$  is the amount to indent prior to  $\langle \textit{sec-num}\rangle$ . Again, emunits preferred ( $\ensuremath{\mbox{QD}(\langle \textit{num}\rangle\text{em}}$ ). When the  $\ensuremath{\mbox{QD}}$  command is present in the argument, a dotted line is to be used for the entry (this is the norm). If  $\ensuremath{\mbox{QD}}$  not present, there is an opportunity within the  $\langle \textit{various}\rangle$  argument to create a custom entry.

no dots

 $\QB{\langle length\rangle}$  Same as  $\QD$ , but no dotted leaders are created.

fmt sec num

 $\ensuremath{\mbox{QN}{\langle fmt\rangle}}$  is the formatting for  $\ensuremath{\mbox{sec-num}}$ . You can pass a command with one argument that will operate on the section number; for example,  $\ensuremath{\mbox{QN}{\langle color{blue}}}$ , or  $\ensuremath{\mbox{QN}{\langle color{blue}}}$ . Note that changing the style to bold might require a corresponding change in  $\ensuremath{\mbox{QW}}$ .

fmt title

 $\CF{\langle fmt \rangle}$  is the formatting for the title heading of the current section; for example,  $\CF{\bfseries}$  turns all heading, for this  $\langle sec-name \rangle$ , bold.

fmt pg num

 $\ensuremath{\texttt{QP}\{\langle fmt \rangle\}}\$  is the formatting for the page number  $(\langle pg\text{-num}\rangle)$ . You can pass a command with one argument that will operate on the page number

When hyperref is loaded with the colorlinks option, we cannot change the color of the page number (see the discussion of \@A above), but \@P{\textit} changes the numbers to italics. If hyperref is not loaded, \@P{\color{red}\textit} changes page numbers to a red italic.

right margin of title

\QR{\langle length\rangle} is a convenience command, it takes its argument and defines the LaTeX command \Qtocrmarg, which sets the right margin for the sec-title. The length set by LaTeX is 2.55em. Setting \QR within the \langle various \rangle argument of \declaretocfmt affects the current section level as well as all lower section levels. If you want to make this 'local' change, you need to put \QR back to its default of 2.55em locally for other declarations.

 $TOC \ number$ 

\@E Within the minitocfmt environment, the command \@E expands to the current TOC entry number of the TOC entry being read in.

link anchor

\@L This macro expands to the hyperref anchor of the page entry reference, it is empty if hyperref is not loaded.

pq number

\@Pg This macro expands to the page number this entry references.

```
Usually, the \langle length \rangle argument is measured in em units (\langle num \rangle em).
```

171 \newtoks\mtoc@toks

172 \newtoks\mtocs@toks@

Within the minitocfmt, \@D is \let to \sl@dots.

```
173 \def\sl@dots#1{\def\sl@dots{%}}
```

174 \@dottedtocline{\sl@current}{#1}{\mtoc@numBoxWidth}}}

175  $\left| \text{let}\right| \$  @gobble

176 \def\sl@nodots#1{\def\sl@@dots{%

177 \no@dottedtocline{\sl@current}{#1}{\mtoc@numBoxWidth}}}

178 \let\sl@@nodots\@gobble

Within the minitocfmt, \@F is \let to \@EntryFmt.

179 \def\sl@EntryFmt#1{\def\sl@@EntryFmt{#1}} % dps

180 \let\sl@@EntryFmt\relax % dps

Within the minitocfmt, \@N is \let to \sl@sNumFmt.

181 \def\sl@sNumFmt#1{\def\sl@@sNumFmt{#1}}

 $182 \left| \text{let} \right|$ 

Within the minitocfmt, \@P is \let to \sl@pNumFmt.

183 \def\sl@pNumFmt#1{\def\sl@@pNumFmt{#1}}

184 \let\sl@QpNumFmt\relax

185 \def\sl@tocrmarg#1{\def\@tocrmarg{#1}}

186 \def\sl@dotsep#1{\def\@dotsep{#1}}

187 \def\mtoc@star#1\*#2\@nil{\def\@rgii{#2}\ifx\@rgii\@empty

l88 \let\mtoc@@star\mtoc@Zero\else\let\mtoc@@star\mtoc@One\fi}

¶¶ The \declaretocfmt command defined. The \declaretocfmt is used to designed how a mini-toc entry is displayed.

 $\label{eq:condition} $$ \color= \col$ 

```
189 \long\def\declaretocfmt#1#2{%
     \xdef\sl@current{\@nameuse{sl@#1}}%
190
     \global\@namedef{\mtoc@CmdName @l@#1}##1##2{%
191
       \normalfont\normalcolor\let\@E\TOCEntryNum
192
       \let\@L\mtoc@HY@anchor\let\@Pg\mtoc@PgNum
193
194
       \let\sl@dots\@empty\let\sl@@sNumFmt\relax
195
       \let\sl@@pNumFmt\relax\let\sl@@EntryFmt\relax
       \let\@W\numBoxWidth\let\@R\sl@tocrmarg\let\@D\sl@dots
196
197
       \let\@B\sl@nodots\let\@F\sl@EntryFmt\let\@N\sl@sNumFmt
198
       \let\@P\sl@pNumFmt
       #2\ifx\sl@dots\@empty\let\sl@next\relax\else
199
         \mtoc@star#1*\@nil % dps
200
         \ifx\mtoc@@star\mtoc@Zero
201
           \def\sl@next{\sl@@dots{##1}{\sl@@pNumFmt{##2}}}\else
202
           \def\sl@next{\sl@@dots{\sl@@EntryFmt##1}{\sl@@pNumFmt{##2}}}\fi
203
       \fi\sl@next}%
204
     \edef\x{\expandafter\noexpand\csname 10#1\endcsname}%
205
     \edef\y{\expandafter\noexpand\csname\mtoc@CmdName @1@#1\endcsname}%
206
207
     \edef\mtoc@dtmp{\the\mtoc@toks\let\expandafter\noexpand\x=
208
     \expandafter\noexpand\y}
209
     \global\mtoc@toks=\expandafter{\mtoc@@tmp}}
210 \def\mtoc@getCmdName#1{\edef\mtoc@CmdName{\expandafter
     \@gobble\string#1}}
```

¶¶ The minitocfmt environment defined. Is a 'simplified' way of designing toc entries.

minitocfmt{\\circ\command\comm

212 \newenvironment{minitocfmt}[1]{\makeatletter

 $213 \qquad \texttt{\gdef\@mtoc@cmd@0{\#1}\let\@A\mtoc@addto}$ 

The \mtoc@getCmdName returns the cmdName (without backslash). cmdName is used the creating command sequences, using to this definition.

 $214 \\ \mbox{$\mathbb{4}$} \mbox{$\mathbb{4}$} \mbox{$\mathbb{C}$} \mbox{$ 

215 \let\@R\sl@tocrmarg}%

The body of the environment consists of one or more \declaretocfmt commands, these commands contribute to \mtoc@toks. \mtoc@toks consists of all the formatting declarations requested.

 ${\tt 216~\coloredge with coloredge w$ 

\mtoc@addto is a macro to add to the declarations. Within minitocfmt is \@A is \let to \mtoc@addto.

```
217 \def\mtoc@addto#1{\edef\mtoc@ctmp{\the\mtoc@toks}%
218 \global\mtoc@toks=\expandafter{\mtoc@ctmp #1}}
```

#### $219 \end{figure} $$219 \end{fi$

Here is code from latex.ltx for \@dottedtocline, we modify it so there are no leaders.

```
220 \def\no@dottedtocline#1#2#3#4#5{%
     \ifnum #1>\c@tocdepth \else
221
       \ \vskip \z0 \0plus.2\p0
222
223
       {\leftskip #2\relax \rightskip \@tocrmarg \parfillskip -\rightskip
224
        \parindent #2\relax\@afterindenttrue
        \interlinepenalty\@M
225
        \leavevmode
226
        \@tempdima #3\relax
227
        \advance\leftskip \@tempdima \null\nobreak\hskip -\leftskip
228
229
        {#4}\nobreak
230 %
         \leaders\hbox{$\m@th
231 %
            \mkern \@dotsep mu\hbox{.}\mkern \@dotsep
232 %
           mu$}\hfill
233 % Insert an \hfill
        \hfill
234
235
        \nobreak
236
        \hb@xt@\@pnumwidth{\hfil\normalfont \normalcolor #5}%
237
        \par}%
238
     \fi}
239 \langle /package \rangle
```

## 3 Index

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.

Symbols	\aebLastPage 99
\@A 213	\AtBeginDocument 112
\@B 197	\AtEndDocument 104
\@D 196	\AtEndOfPackage 3
\@DS 214	-
\@E 192	В
\@F 197	\BTMLevel 3, 17, 19
\@L 193	\BTMLevelNum 18, 70, 144
\@MiniTocListingsfalse 161	
\@MiniTocListingstrue 135, 162	$\mathbf{C}$
\@N 197	\c@tocdepth
\@P 198	\cl@LOOKFORSEC
\@PW 214	\cl@LOOKFORSEC@HY
\@Pg 193	\cl@LOOKFORSEC@LX
\@R 196, 215	\contentsline 7, 121, 151
\@W 196	\csarg 12, 23, 24, 29, 30, 33, 38-42, 129
\@afterindenttrue 224	D
\@auxout 128	\DeclareOption
\@bsphack 127	\declaretocfmt
\@chkForNl 5, 56, 83	\declaretocimt 109
\@currentsecname	${f E}$
$\verb \dotsep  \dots \dots 186, 231$	environments:
\@dottedtocline 174	minitocfmt
$\verb \dfoundTOPLevelfalse  43, 66, 153 $	<u></u>
\@foundTOPLeveltrue 64	${f F}$
\@ifclassloaded 20, 26	\FmtTOCEntry
\@input 116	·
\@minitocCnt 2, 11, 109, 110, 129, 142	Н
\@minitocfalse 134, 136	\hb@xt@ 236
\@minitoctrue 137	
\@mtoc@cmd@@ 213, 216	I
\@nlrtn 71, 84, 85	\if@filesw 87
\Onobreakfalse	\if@foundTOPLevel 43, 50, 69
\@plus	\if@minitoc
\Qpnumwidth	\if@MiniTocListings
\\0startsection \\\124, 125	\ifMiniTocListings
\\Qstartsection\Qstartsection\\Qstartsection\qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq	\InputIfFileExists
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\insertminitoc
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\insertminitocNOT
!nominitocs (option)	\interilinepenatty 220
: nominitioos (option)	${f L}$
A	\label 127
\addtocontents 10, 112, 113	\leaders
\addtocontents@mtoc 107, 113	\leftskip 223, 228

${f M}$	\no@dottedtocline 177, 220
\m@th 230	\nobreak 228, 229, 235
\makeatletter 115, 157, 212	\NoFmtTOCEntry 117, 136
\makeatother 116, 163	nominitocs (option) 1
\miniorfulltoc	\normalcolor
minitocfmt (environment) 212	\normalfont 192, 236
\MiniTocListingsfalse	\null 228
\MiniTocListingstrue	\numberline 84, 85, 154, 155
\mkern 231	\numBoxWidth 8, 169, 170, 196
\mt@rgi 49, 59, 108	\NUMLevel 51, 52, 70
\mtoc@@contentsline 44, 73, 75	
\mtoc@@star 188, 201	O
\mtoc@@starttoc 90, 94, 95	\openout 88
\mtoc@@tmp 207, 209, 217, 218	options:
\mtoc@addto 11, 213, 217	!nominitocs 1
\mtoc@addtocontents 10, 110-112	nominitocs 1
\mtoc@BTMLevel 18	_
\mtoc@CL@mtoc 6, 120, 152	P
\mtoc@CmdName 191, 206, 210	\p@ 222
\mtoc@contentsline	\PackageError
\mtoc@getCmdName 210, 214	\PackageInfo
\mtoc@HY@anchor 45, 193	\PackageWarning
\mtoc@next 122, 123	\parfillskip 223
\mtoc@numberline	\parindent 224
\mtoc@numBoxWidth 155, 169, 174, 177	\ProcessOptions
\mtoc@One 13, 90, 94, 188	\protected@write 128
\mtoc@parse 120, 121	R
\mtoc@PgNum	\rightskip 223
\mtoc@PW	(lightskip 220
\mtoc@sec	
\mucocesec	$\mathbf{S}$
\mtoc@st@rttoc 86 06 100	S \SECNUM
\mtoc@st@rttoc	\SECNUM 60, 63
\mtoc@star 187, 200	\SECNUM
\mtoc@star	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$
\mtoc@start	\SECNUM
\mtoc@start \	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$
\mtoc@start \	\SECNUM
\mtoc@start \	\SECNUM
\mtoc@star \ 187, 200 \\mtoc@start@next \ 91, 96, 97, 100, 101 \\mtoc@start@toc \ 91, 104 \\mtoc@starttoc \ 8, 119 \\mtoc@tableofcontents \ 9, 118 \\mtoc@tmp \ 58, 72, 74 \\mtoc@tTOC \ 105, 108	\SECNUM 60, 63 \set@display@protect 61 \set@typeset@protect 67 \sl@dots 173, 175, 176, 194, 199, 202, 203 \sl@EntryFmt 156, 179, 180, 195, 203 \sl@Onodots 178 \sl@OpNumFmt 183, 184, 195, 202, 203 \sl@OsNumFmt 156, 181, 182, 194 \sl@all 37
\mtoc@star \ 187, 200 \mtoc@start@next \ 91, 96, 97, 100, 101 \mtoc@start@toc \ 91, 104 \mtoc@starttoc \ 8, 119 \mtoc@tableofcontents \ 9, 118 \mtoc@tmp \ 58, 72, 74 \mtoc@tTOC \ 105, 108 \mtoc@toks \ 171, 207, 209, 214, 216-218	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$
\mtoc@star \ 187, 200 \mtoc@start@next \ 91, 96, 97, 100, 101 \mtoc@start@toc \ 91, 104 \mtoc@starttoc \ 8, 119 \mtoc@tableofcontents \ 9, 118 \mtoc@tmp \ 58, 72, 74 \mtoc@tTOC \ 105, 108 \mtoc@toks \ 171, 207, 209, 214, 216-218 \mtoc@tTOPLevel \ 16, 59, 146	\SECNUM 60, 63 \set@display@protect 61 \set@typeset@protect 67 \sl@dots 173, 175, 176, 194, 199, 202, 203 \sl@EntryFmt 156, 179, 180, 195, 203 \sl@Onodots 178 \sl@OpNumFmt 183, 184, 195, 202, 203 \sl@OsNumFmt 156, 181, 182, 194 \sl@all 37
\mtoc@star \ 187, 200 \mtoc@start@next \ 91, 96, 97, 100, 101 \mtoc@start@toc \ 91, 104 \mtoc@starttoc \ 8, 119 \mtoc@tableofcontents \ 9, 118 \mtoc@tmp \ 58, 72, 74 \mtoc@tTOC \ 105, 108 \mtoc@toks \ 171, 207, 209, 214, 216-218	\SECNUM 60, 63 \set@display@protect 61 \set@typeset@protect 67 \sl@@dots 173, 175, 176, 194, 199, 202, 203 \sl@@EntryFmt 156, 179, 180, 195, 203 \sl@@nodots 178 \sl@@pNumFmt 183, 184, 195, 202, 203 \sl@@sNumFmt 156, 181, 182, 194 \sl@all 37 \sl@chapter 22, 24, 28, 30
\mtoc@star \ 187, 200 \mtoc@start@next \ 91, 96, 97, 100, 101 \mtoc@start@toc \ 91, 104 \mtoc@starttoc \ 8, 119 \mtoc@tableofcontents \ 9, 118 \mtoc@tmp \ 58, 72, 74 \mtoc@tTOC \ 105, 108 \mtoc@toks \ 171, 207, 209, 214, 216-218 \mtoc@tTOPLevel \ 16, 59, 146 \mtoc@Zero \ 13, 95, 188, 201	\SECNUM 60, 63 \set@display@protect 61 \set@typeset@protect 67 \sl@@dots 173, 175, 176, 194, 199, 202, 203 \sl@@EntryFmt 156, 179, 180, 195, 203 \sl@@nodots 178 \sl@@pNumFmt 183, 184, 195, 202, 203 \sl@@sNumFmt 156, 181, 182, 194 \sl@all 37 \sl@chapter 22, 24, 28, 30 \sl@current 174, 177, 190 \sl@dots 173, 196 \sl@dotsep 186, 214
\mtoc@star \ 187, 200 \mtoc@start@next \ 91, 96, 97, 100, 101 \mtoc@start@toc \ 91, 104 \mtoc@starttoc \ 8, 119 \mtoc@tableofcontents \ 9, 118 \mtoc@tmp \ 58, 72, 74 \mtoc@tTOC \ 105, 108 \mtoc@toks \ 171, 207, 209, 214, 216-218 \mtoc@tTOPLevel \ 16, 59, 146 \mtoc@zero \ 13, 95, 188, 201 \mtocCL \ 50, 53, 57, 106, 110, 152	\SECNUM 60, 63 \set@display@protect 61 \set@typeset@protect 67 \slowdots 173, 175, 176, 194, 199, 202, 203 \slowdots 156, 179, 180, 195, 203 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 183, 184, 195, 202, 203 \slowdots 156, 181, 182, 194 \slowdots 156, 181, 182, 194 \slowdots 173, 196 \slowdots 173, 196 \slowdots 173, 196 \slowdotsep 186, 214 \slowdotsep 179, 197
\text{\text{mtocQstar}} \ \ \text{187, 200} \ \text{\text{mtocQstartQnext}} \ \ \ 91, 96, 97, 100, 101 \ \text{\text{mtocQstartQtoc}} \ \ 91, 104 \ \text{\text{mtocQstartQtoc}} \ \ 8, 119 \ \text{\text{mtocQtableofcontents}} \ \ \ 9, 118 \ \text{\text{mtocQtmp}} \ \ 58, 72, 74 \ \text{\text{mtocQTOC}} \ \ 105, 108 \ \text{\text{mtocQtOKS}} \ \ 171, 207, 209, 214, 216-218 \ \text{\text{mtocQTOPLevel}} \ \ 16, 59, 146 \ \text{\text{mtocQZero}} \ 13, 95, 188, 201 \ \text{\text{mtocCL}} \ \ 50, 53, 57, 106, 110, 152 \ \text{\text{mtocgobble}} \ \ \ 3, 14 \ \end{array}	\SECNUM 60, 63 \set@display@protect 61 \set@typeset@protect 67 \sl@dots 173, 175, 176, 194, 199, 202, 203 \sl@EntryFmt 156, 179, 180, 195, 203 \sl@@nodots 178 \sl@@pNumFmt 183, 184, 195, 202, 203 \sl@@sNumFmt 156, 181, 182, 194 \sl@all 37 \sl@chapter 22, 24, 28, 30 \sl@current 174, 177, 190 \sl@dots 173, 196 \sl@dotsep 186, 214 \sl@EntryFmt 179, 197 \sl@next 199, 202-204
\text{\text{mtocQstar}} \ \ \text{187, 200} \ \text{\text{mtocQstartQnext}} \ \ \ 91, 96, 97, 100, 101 \ \text{\text{mtocQstartQtoc}} \ \ 91, 104 \ \text{\text{mtocQstartQtoc}} \ \ 91, 104 \ \text{\text{mtocQstartCoc}} \ \ 9, 118 \ \text{\text{mtocQtmp}} \ \ 58, 72, 74 \ \text{\text{mtocQtmp}} \ \ 105, 108 \ \text{\text{mtocQTOC}} \ \ 105, 108 \ \text{\text{mtocQTOPLevel}} \ \ 16, 59, 146 \ \text{\text{mtocQTOPLevel}} \ 13, 95, 188, 201 \ \text{\text{mtocQToC}} \ \ 105, 53, 57, 106, 110, 152 \ \text{\text{mtocgobble}} \ \ 3, 14 \ \text{\text{mtoclabel}} \ \ 6, 127 \ \end{array}	\SECNUM 60, 63 \set@display@protect 61 \set@typeset@protect 67 \sl@dots 173, 175, 176, 194, 199, 202, 203 \sl@EntryFmt 156, 179, 180, 195, 203 \sl@@pNumFmt 183, 184, 195, 202, 203 \sl@@sNumFmt 183, 184, 195, 202, 203 \sl@esNumFmt 156, 181, 182, 194 \sl@all 37 \sl@chapter 22, 24, 28, 30 \sl@current 174, 177, 190 \sl@dots 173, 196 \sl@dotsep 186, 214 \sl@EntryFmt 199, 202-204 \sl@nodots 176, 197
$\begin{array}{llllllllllllllllllllllllllllllllllll$	\SECNUM 60, 63 \set@display@protect 61 \set@typeset@protect 67 \slowdots 173, 175, 176, 194, 199, 202, 203 \slowdots 156, 179, 180, 195, 203 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 183, 184, 195, 202, 203 \slowdots 156, 181, 182, 194 \slowdots 156, 181, 182, 194 \slowdots 174, 177, 190 \slowdots 174, 177, 190 \slowdots 173, 196 \slowdots 173, 196 \slowdots 173, 196 \slowdots 179, 197 \slowdots 199, 202-204 \slowdots 176, 197 \slowdots 176, 197 \slowdots 176, 197 \slowdots 176, 197
\mtoc@star \ 187, 200 \mtoc@start@next \ 91, 96, 97, 100, 101 \mtoc@start@toc \ 91, 104 \mtoc@starttoc \ 8, 119 \mtoc@tableofcontents \ 9, 118 \mtoc@tmp \ 58, 72, 74 \mtoc@tTOC \ 105, 108 \mtoc@toks \ 171, 207, 209, 214, 216-218 \mtoc@tTOPLevel \ 16, 59, 146 \mtoc@Zero \ 13, 95, 188, 201 \mtocCL \ 50, 53, 57, 106, 110, 152 \mtocgobble \ 3, 14 \mtoclabel \ 6, 127 \mtocref \ 6, 133, 143 \mtocs@toks@ \ 58, 72, 74, 150, 160, 163, 172	\SECNUM 60, 63 \set@display@protect 61 \set@typeset@protect 67 \slowdots 173, 175, 176, 194, 199, 202, 203 \slowdots 173, 175, 176, 194, 199, 202, 203 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 156, 181, 182, 194 \slowdots 156, 181, 182, 194 \slowdots 156, 181, 182, 194 \slowdots 174, 177, 190 \slowdots 174, 177, 190 \slowdots 174, 177, 190 \slowdots 173, 196 \slowdots 173, 196 \slowdots 173, 196 \slowdots 173, 196 \slowdots 173, 197 \slowdots 199, 202-204 \slowdots 176, 197
$\begin{array}{llllllllllllllllllllllllllllllllllll$	\SECNUM 60, 63 \set@display@protect 61 \set@typeset@protect 67 \slowdots 173, 175, 176, 194, 199, 202, 203 \slowdots 156, 179, 180, 195, 203 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 178 \slowdots 183, 184, 195, 202, 203 \slowdots 156, 181, 182, 194 \slowdots 156, 181, 182, 194 \slowdots 174, 177, 190 \slowdots 174, 177, 190 \slowdots 173, 196 \slowdots 173, 196 \slowdots 173, 196 \slowdots 179, 197 \slowdots 199, 202-204 \slowdots 176, 197 \slowdots 176, 197 \slowdots 176, 197 \slowdots 176, 197

\sl@section       36, 38         \sl@sNumFmt       181, 197         \sl@subparagraph       37, 42         \sl@subsection       36, 39         \sl@subsubsection       36, 40	\TOCEntryNum
\sl@tocrmarg 185, 196, 215	\x 15, 17, 160, 205, 207
Т	\x 15, 17, 160, 205, 207
\tableofcontents 9, 114	<b>Y</b> \y 206, 208
4 Change History	
v1.2 (2018/08/29)  General: Created aeb-minitoc.ins	v1.6 (2018/09/21)  General: Code cleanup in prepreparation for release