# The aeb-minitoc Package

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### Contents

1	Description	]
2	Documentation and Code.	2
3	Index	13
4	Change History	1
1	(*package)	

\ifMiniTocListings

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 LATEX 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{paragraph}{\@W{1em}\@D{0em}}
\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 \tableofcontents	5
$\P$ Modify \addtocontents	5
¶ Modify \@startsection and referencing	6
$\P$ \insertminitoc: The main command	6
¶ The mini-toc format environment: minitocfmt	8
$\P\P$ The \declaretocfmt command defined	10
$\P\P$ The minitocfmt environment defined	11

We begin by saving the definitions macros we modify later.

- 7 \let\mtoc@contentsline\contentsline
- 8 \let\mtoc@starttoc\@starttoc
- $9 \verb|\label{lem:stable}| 9 \le \times table of contents = \times table of co$
- 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

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

19 \def\TOCLevels#1#2{\TOPLevel{#1}\BTMLevel{#2}}

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{\@nameuse{sl@#1}}\fi} 17 \def\BTMLevel#1{\def\x{#1}\ifx\x\@empty\else 18 \def\mtoc@BTMLevel{#1}\edef\BTMLevelNum{\@nameuse{sl@#1}}\fi}
- ¶¶ 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 \cl@LOOKFORSEC. 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.

```
 \begin{array}{lll} 44 \ef\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}\} \end{array}
```

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
                                                     {%
                                       94
                                                            \ifx\mtoc@@starttoc\mtoc@One
                                                                   \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\}\) 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\}\. Initially,

\mtocCL just passes its argument into the TFX 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 \renewcommand\addtocontents[2] {%

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

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

- 112 \def\tableofcontents{%
- \def\@starttoc##1{\makeatletter 113
- \@input{\jobname.##1}\makeatother}% 114
- \NoFmtTOCEntry 115
- \mtoc@tableofcontents 116
- \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.

- ${\tt 118 \ \ loc@CL@mtoc}[1]{\tt \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ }[1]{\tt \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ }[1]}$
- 119 \def\mtoc@parse#1#2\@nil{\ifx#1\contentsline
- \def\mtoc@next##1{#1#2{##1}}\else
- 121 \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.

```
122 \let\@startsection@mtoc@SAVE\@startsection
```

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

\mtoclabel

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

```
125 \def\mtoclabel#1{\label{#1}\@bsphack
```

- 126 \protected@write\@auxout{}{\string
- \csarg{\string\gdef}{mtoclbl#1}{\the\@minitocCnt} 127
- }% 128
- \@esphack 129
- 130 }
- 131 \def\mtocref#1{\@nameuse{mtoclbl#1}}

\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.

```
132 \newif\if@minitoc \@minitocfalse
133 \newif\if@MiniTocListings \@MiniTocListingstrue
134 \def\NoFmtTOCEntry{\@minitocfalse}
135 \def\FmtTOCEntry{\@minitoctrue}
136 \def\miniorfulltoc#1#2{\if@minitoc
137 {{#1{#2}}}\else{#2}\fi}
```

\insertminitoc[\langle l-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 minitoc 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.

```
138 \newcommand{\insertminitoc}[1][]{%
     \def\mtoc@rgi{#1}\ifx\mtoc@rgi\@empty
139
       \edef\mtoc@rgi{MTOC.\the\@minitocCnt}\else
140
       \edef\mtoc@rgi{MTOC.\mtocref{#1}}\fi
141
     \ifnum\TOPLevelNum > \BTMLevelNum
142
       \PackageError{aeb-minitoc}{%
143
         The top level (\mtoc@TOPLevel) must be\MessageBreak
         must be higher on the hierarchy then at bottom level}
145
         {Try switching the two}\fi
146
147
     \begingroup
     \edef\mtoc@sec{\mtoc@rgi}\mtocs@toks@={}%
148
 \let \contentsline to \cl@LOOKFORSEC
    \let\contentsline\cl@LOOKFORSEC
\let \mtocCL to \mtoc@CL@mtoc
     \let\mtocCL\mtoc@CL@mtoc
150
     \@foundTOPLevelfalse
151
     \let\mtoc@numberline\numberline
Insert formatting (\Pg = \sline \NumFmt) for the page number here.
     \def\numberline##1{\makebox[\mtoc@numBoxWidth][1]%
153
154
       {\sl@@sNumFmt{##1}}\sl@@EntryFmt}%
```

```
155 \makeatletter\InputIfFileExists{\jobname.toc}%
156 {\PackageInfo{aeb-minitoc}{TOC file read}}
157 {\PackageInfo{aeb-minitoc}{TOC file not available}}%
158 \edef\x{\the\mtocs@toks@}\ifx\x\@empty
159 \global\@MiniTocListingsfalse\else
160 \global\@MiniTocListingstrue\fi
```

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

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

\insertminitocNOT

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

166 \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.

```
167 \def\numBoxWidth#1{\def\mtoc@numBoxWidth{#1}}
168 \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{ $\langle toc-fmt \rangle$ } 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.

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

pq num box width

 $\label{length} $$ \end{argument of \QA, insert \QPW{\length}}$ to set the width of the box that contains the page number (\Qpnumwidth). The value set by LATEX is 1.55em.$ 

dots separation

\QDS{\(\num\)\} The \(\num\)\ determines the separation between dots for a TOC entry that uses a dotted rule line. This command is only recognized within the argument of \QA. The default is 4.5.

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. The \langle length\rangle of \QR should be larger than the \langle length\rangle set by \QPW.

 $\declaretocfmt{\langle sec-name\rangle}{\langle various\rangle}$  formats all  $\langle sec-name\rangle$  (section, subsection, 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, em units 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

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

fmt sec num

\@N{\fmt\} is the formatting for \( sec-num\). You can pass a command with
 one argument that will operate on the section number; for example,
 \@N{\textbf}, \@N{\color{blue}}, or \@N{\color{blue}\textbf}.
 Note that changing the style to bold might require a corresponding
 change in \@W.

 $fmt\ title$ 

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

fmt pg num

 $\ensuremath{\mbox{QP}\{\langle fmt\rangle\}}$  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  $\ensuremath{\mbox{QA}}$  above), but  $\ensuremath{\mbox{QP}\{\text{color}\{\text{red}\}\text{textit}\}}$  changes the numbers to italics. If hyperref is not loaded,  $\ensuremath{\mbox{QP}\{\text{color}\{\text{red}\}\text{textit}\}}$  changes page numbers to a red italic.

```
right margin of title
                          \CR\{\langle length\rangle\}\ is a convenience command, it takes its argument and de-
                               fines the LATEX command \@tocrmarg, which sets the right margin for
                               the sec-title. The length set by LATEX is 2.55em. Setting \OR within
                               the (various) 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 \@R 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).
                   169 \newtoks\mtoc@toks
                   170 \newtoks\mtocs@toks@
                    Within the minitocfmt, \@D is \let to \sl@dots.
                   171 \def\sl@dots#1{\def\sl@@dots{%
                        \@dottedtocline{\sl@current}{#1}{\mtoc@numBoxWidth}}}
                   173 \let\sl@dots\@gobble
                   174 \def\sl@nodots#1{\def\sl@@dots{%
                        \no@dottedtocline{\sl@current}{#1}{\mtoc@numBoxWidth}}}
                   176 \let\sl@@nodots\@gobble
                    Within the minitocfmt, \@F is \let to \@EntryFmt.
                   177 \def\sl@EntryFmt#1{\def\sl@@EntryFmt{#1}} % dps
                   178 \let\sl@@EntryFmt\relax % dps
                    Within the minitocfmt, \@N is \let to \sl@sNumFmt.
                   179 \def\sl@sNumFmt#1{\def\sl@@sNumFmt{#1}}
                   180 \let\sl@@sNumFmt\relax
                    Within the minitocfmt, \@P is \let to \sl@pNumFmt.
                   181 \def\sl@pNumFmt#1{\def\sl@@pNumFmt{#1}}
                   182 \let\sl@@pNumFmt\relax
                   183 \def\sl@tocrmarg#1{\def\@tocrmarg{#1}}
                   184 \def\sl@dotsep#1{\def\@dotsep{#1}}
                   185 \def\mtoc@star#1*#2\@nil{\def\@rgii{#2}\ifx\@rgii\@empty
                        \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:constant} $$ \end{aretacfmt} $$ \langle \textit{various} \rangle $$ The aeb-mintoc way of declaring the formatting for a toc $$ \langle \textit{sec-name} \rangle $$ entry. The $$ \langle \textit{various} \rangle $$ argument consists of various combinations of $$ (@W, \@D, \@N, and \@P. )$$$ 

```
187 \long\def\declaretocfmt#1#2{%
188 \xdef\sl@current{\@nameuse{sl@#1}}%
```

```
\global\@namedef{\mtoc@CmdName @l@#1}##1##2{%
189
       \normalfont\normalcolor\let\@E\TOCEntryNum
190
       \let\@L\mtoc@HY@anchor\let\@Pg\mtoc@PgNum
191
       \let\sl@dots\@empty\let\sl@@sNumFmt\relax
192
       \let\sl@@pNumFmt\relax\let\sl@@EntryFmt\relax
193
       \let\@W\numBoxWidth\let\@R\sl@tocrmarg\let\@D\sl@dots
194
195
       \let\@B\sl@nodots\let\@F\sl@EntryFmt\let\@N\sl@sNumFmt
196
       \let\@P\sl@pNumFmt
       #2\ifx\sl@dots\@empty\let\sl@next\relax\else
197
         \mtoc@star#1*\@nil % dps
198
         \ifx\mtoc@@star\mtoc@Zero
199
           200
           \def\sl@next{\sl@@dots{\sl@@EntryFmt##1}{\sl@@pNumFmt{##2}}}\fi
201
       \fi\sl@next}%
202
     \edef\x{\expandafter\noexpand\csname 10#1\endcsname}%
203
     \edef\y{\expandafter\noexpand\csname\mtoc@CmdName @l@#1\endcsname}%
204
     \verb|\edef| toc@0tmp{\label{let} expandafter\\ noexpand\\ x=0.
205
     \expandafter\noexpand\y}
206
207
     \global\mtoc@toks=\expandafter{\mtoc@@tmp}}
208 \def\mtoc@getCmdName#1{\edef\mtoc@CmdName{\expandafter
     \@gobble\string#1}}
```

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

```
210 \newenvironment{minitocfmt}[1]{\makeatletter
```

 $211 \qquad \texttt{\gdef\embox{\gdef}\em$ 

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

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.

214 }{\expandafter\xdef\@mtoc@cmd@@{\the\mtoc@toks}}

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

```
215 \def\mtoc@addto#1{\edef\mtoc@@tmp{\the\mtoc@toks}%
216 \global\mtoc@toks=\expandafter{\mtoc@@tmp #1}}
217 \def\mtoc@PW#1{\def\@pnumwidth{#1}}
```

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

218 \def\no@dottedtocline#1#2#3#4#5{%

```
\ifnum #1>\c@tocdepth \else
219
        \ \vskip \z0 \plus.2\p0
220
        {\leftskip #2\relax \rightskip \@tocrmarg \parfillskip -\rightskip
221
         \parindent #2\relax\@afterindenttrue
222
223
         \interlinepenalty\@M
224
         \leavevmode
225
         \@tempdima #3\relax
226
         \label{leftskip} $$\operatorname{\mathbb{Q}tempdima \null\nobreak\hskip -\leftskip} $$
227
         {#4}\nobreak
          \verb|\label{leadershbox{$\m@th|}}
228 %
             \mkern \@dotsep mu\hbox{.}\mkern \@dotsep
229 %
230 %
            mu$}\hfill
231 % Insert an \hfill
232
         \hfill
233
         \nobreak
234
         \hb@xt@\@pnumwidth{\hfil\normalfont \normalcolor #5}%
235
         \par}%
236
     fi
237 \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	\AtEndDocument 104
!nominitocs (option) 1	\AtEndOfPackage 3
\@A 211	The state of the s
\@B	B
\QD	\BTMLevel 3, 17, 19
\QDS 212	\BTMLevelNum 18, 70, 142
\@E 190	$\mathbf{C}$
\@F	\c@tocdepth 219
\@L 191	\cl@LOOKFORSEC
\@MiniTocListingsfalse 159	\cl@LOOKFORSEC@HY
\@MiniTocListingstrue 133, 160	\cl@LOOKFORSEC@LX
\@N 195	\contentsline
\@P 196	\csarg
\@PW 212	(csarg
\@Pg 191	D
\@R 194, 213	\DeclareOption 3, 5
\@W 194	\declaretocfmt 187
\@afterindenttrue 222	<del></del>
\@auxout 126	${f E}$
\@bsphack 125	environments:
\@chkForNl 5, 56, 83	$\mathtt{minitocfmt} \ \dots \dots \ \underline{210}$
\@currentsecname 123	
\@dotsep 184, 229	${f F}$
\@dottedtocline 172	\FmtTOCEntry
$\verb \QfoundTOPLevelfalse  43, 66, 151 $	Н
\@foundTOPLeveltrue 64	
\@ifclassloaded 20, 26	\hb@xt@ 234
\@input 114	Ī
\@minitocCnt	\if@filesw 87
\@minitocfalse 132, 134	\if@foundTOPLevel 43, 50, 69
\@minitoctrue 135	\if@minitoc
\@mtoc@cmd@@ 211, 214	\if@MiniTocListings
\@nlrtn 71, 84, 85	\ifMiniTocListings
\@nobreakfalse 89	\InputIfFileExists
\@plus 220	\insertminitoc 4, 6, 7, 138
\@pnumwidth	\insertminitocNOT 4, 8, 166
\@rgii 185	\interlinepenalty
\@startsection 122, 123	,
$\verb \del{Continuous}  \textbf{Qstartsection@mtoc@SAVE} \dots 122, 124$	${f L}$
\@starttoc 8, 113, 117	\label 125
\@tocrmarg 183, 221	\leaders 228
	\leftskip 221, 226
A	
\addtocontents 10, 107	M
\aebLastPage 99	\m@th 228

\makeatletter 113, 155, 210	\NoFmtTOCEntry 115, 134
\makeatother 114, 161	nominitocs (option) 1
\miniorfulltoc 7, 136	\normalcolor 190, 234
minitocfmt (environment) 210	\normalfont 190, 234
\MiniTocListingsfalse	\null 226
\MiniTocListingstrue	\numberline 84, 85, 152, 153
\mkern 229	\numBoxWidth
\mt@rgi 49, 59, 108	\NUMLevel 51, 52, 70
\mtoc@@contentsline 44, 73, 75	, ,
\mtoc@@star 186, 199	O
\mtoc@@starttoc 90, 94, 95	\openout 88
\mtoc@@tmp 205, 207, 215, 216	options:
\mtoc@addto 11, 211, 215	!nominitocs 1
\mtoc@addtocontents 10, 110, 111	nominitocs 1
\mtoc@BTMLevel 18	
\mtoc@CL@mtoc 6, 118, 150	P
\mtoc@CmdName 189, 204, 208	\p@ 220
\mtoc@contentsline 7, 46	\PackageError 143
\mtoc@getCmdName 208, 212	\PackageInfo 156, 157
\mtoc@HY@anchor 45, 191	\PackageWarning 163
\mtoc@next 120, 121	\parfillskip 221
\mtoc@numberline 152	\parindent 222
\mtoc@numBoxWidth 153, 167, 172, 175	\ProcessOptions 6
\mtoc@One 13, 90, 94, 186	\protected@write 126
\mtoc@parse 118, 119	
\mtoc@PgNum	$\mathbf{R}$
, ,	
\mtoc@PW 212, 217	\rightskip 221
\mtoc@PW	\rightskip 221
\mtoc@PW 212, 217	\rightskip 221
\mtoc@PW	\rightskip
\mtoc@PW 212, 217 \mtoc@rgi 139-141, 148 \mtoc@sec 62, 63, 148 \mtoc@st@rttoc 86, 96, 100 \mtoc@star 185, 198	\rightskip       221         S       \$         \SECNUM       60, 63         \set@display@protect       61
\mtoc@PW 212, 217 \mtoc@rgi 139-141, 148 \mtoc@sec 62, 63, 148 \mtoc@st@rttoc 86, 96, 100 \mtoc@star 185, 198 \mtoc@start@next 91, 96, 97, 100, 101	S         S         SECNUM       60, 63         \set@display@protect       61         \set@typeset@protect       67
\mtoc@PW 212, 217 \mtoc@rgi 139-141, 148 \mtoc@sec 62, 63, 148 \mtoc@st@rttoc 86, 96, 100 \mtoc@star 185, 198 \mtoc@start@next 91, 96, 97, 100, 101 \mtoc@start@toc 91, 104	\rightskip
\mtoc@PW       212, 217         \mtoc@rgi       139-141, 148         \mtoc@sec       62, 63, 148         \mtoc@st@rttoc       86, 96, 100         \mtoc@star       185, 198         \mtoc@start@next       91, 96, 97, 100, 101         \mtoc@start@toc       91, 104         \mtoc@starttoc       8, 117	\rightskip
\mtoc@PW       212, 217         \mtoc@rgi       139-141, 148         \mtoc@sec       62, 63, 148         \mtoc@st@rttoc       86, 96, 100         \mtoc@star       185, 198         \mtoc@start@next       91, 96, 97, 100, 101         \mtoc@start@toc       91, 104         \mtoc@starttoc       8, 117         \mtoc@tableofcontents       9, 116	\rightskip
\mtoc@PW       212, 217         \mtoc@rgi       139-141, 148         \mtoc@sec       62, 63, 148         \mtoc@stdrttoc       86, 96, 100         \mtoc@star       185, 198         \mtoc@start@next       91, 96, 97, 100, 101         \mtoc@start@toc       91, 104         \mtoc@starttoc       8, 117         \mtoc@tableofcontents       9, 116         \mtoc@tmp       58, 72, 74	S   SECNUM
\mtoc@PW       212, 217         \mtoc@rgi       139-141, 148         \mtoc@sec       62, 63, 148         \mtoc@stdrttoc       86, 96, 100         \mtoc@star       185, 198         \mtoc@start@next       91, 96, 97, 100, 101         \mtoc@start@toc       91, 104         \mtoc@starttoc       8, 117         \mtoc@tableofcontents       9, 116         \mtoc@tmp       58, 72, 74         \mtoc@TOC       105, 108	S   SECNUM
\text{\text{mtocQPW}} 212, 217 \text{\text{mtocQrgi}} 139-141, 148 \text{\text{mtocQsec}} 62, 63, 148 \text{\text{\text{mtocQstQrttoc}}} 86, 96, 100 \text{\text{\text{mtocQstartQnext}}} 185, 198 \text{\text{\text{\text{mtocQstartQnext}}} 91, 96, 97, 100, 101 \text{\te\text{\t	S   SECNUM
\text{\text{mtocQPW}} \ 212, 217 \text{\text{mtocQrgi}} \ 139-141, 148 \text{\text{mtocQsec}} \ 62, 63, 148 \text{\text{mtocQsteCttoc}} \ 86, 96, 100 \text{\text{\text{mtocQstartQnext}}} \ 185, 198 \text{\text{\text{mtocQstartQnext}}} \ 91, 96, 97, 100, 101 \text{\text{\text{mtocQstartQtoc}}} \ 91, 104 \text{\text{\text{mtocQstarttoc}}} \ 8, 117 \text{\text{\text{mtocQtableofcontents}}} \ 9, 116 \text{\text{\text{mtocQttmp}}} \ 58, 72, 74 \text{\text{\text{mtocQtTOC}}} \ 105, 108 \text{\text{\text{mtocQtoks}}} \ 169, 205, 207, 212, 214-216 \text{\text{\text{mtocQtTOPLevel}}} \ 16, 59, 144	S         SECNUM       60, 63         \set@display@protect       61         \set@typeset@protect       67         \sl@dots       171, 173, 174, 192, 197, 200, 201         \sl@EntryFmt       154, 177, 178, 193, 201         \sl@enodots       176         \sl@enynumFmt       181, 182, 193, 200, 201         \sl@enynumFmt       154, 179, 180, 192         \sl@all       37         \sl@chapter       22, 24, 28, 30
\mtoc@PW 212, 217 \mtoc@rgi 139-141, 148 \mtoc@sec 62, 63, 148 \mtoc@st@rttoc 86, 96, 100 \mtoc@start 185, 198 \mtoc@start@next 91, 96, 97, 100, 101 \mtoc@starttoc 91, 104 \mtoc@starttoc 8, 117 \mtoc@tableofcontents 9, 116 \mtoc@tmp 58, 72, 74 \mtoc@toks 169, 205, 207, 212, 214-216 \mtoc@tTOPLevel 16, 59, 144 \mtoc@toc@tore 13, 95, 186, 199	S         SECNUM       60, 63         \set@display@protect       61         \set@typeset@protect       67         \sl@@dots       171, 173, 174, 192, 197, 200, 201         \sl@@EntryFmt       154, 177, 178, 193, 201         \sl@@nodots       176         \sl@@pNumFmt       181, 182, 193, 200, 201         \sl@@sNumFmt       154, 179, 180, 192         \sl@all       37         \sl@chapter       22, 24, 28, 30         \sl@current       172, 175, 188
\mtoc@PW	S         SECNUM       60, 63         \set@display@protect       61         \set@typeset@protect       67         \sl@@dots       171, 173, 174, 192, 197, 200, 201         \sl@@EntryFmt       154, 177, 178, 193, 201         \sl@@nodots       176         \sl@@pNumFmt       181, 182, 193, 200, 201         \sl@@sNumFmt       154, 179, 180, 192         \sl@all       37         \sl@chapter       22, 24, 28, 30         \sl@current       172, 175, 188         \sl@dots       171, 194
\mtoc@PW	S         SECNUM       60, 63         \set@display@protect       61         \set@typeset@protect       67         \sl@@dots       171, 173, 174, 192, 197, 200, 201         \sl@@EntryFmt       154, 177, 178, 193, 201         \sl@@nodots       176         \sl@@pNumFmt       181, 182, 193, 200, 201         \sl@@sNumFmt       154, 179, 180, 192         \sl@all       37         \sl@chapter       22, 24, 28, 30         \sl@current       172, 175, 188         \sl@dots       171, 194         \sl@dotsep       184, 212
\mtoc@PW       212, 217         \mtoc@rgi       139-141, 148         \mtoc@sec       62, 63, 148         \mtoc@st@rttoc       86, 96, 100         \mtoc@star       185, 198         \mtoc@start@next       91, 96, 97, 100, 101         \mtoc@start@toc       91, 104         \mtoc@starttoc       8, 117         \mtoc@tableofcontents       9, 116         \mtoc@tmp       58, 72, 74         \mtoc@toc       105, 108         \mtoc@toks       169, 205, 207, 212, 214-216         \mtoc@tOC       13, 95, 186, 199         \mtocCL       50, 53, 57, 106, 110, 150         \mtocgobble       2, 14         \mtoclabel       6, 125	S   SECNUM
\mtoc@PW       212, 217         \mtoc@rgi       139-141, 148         \mtoc@sec       62, 63, 148         \mtoc@st@rttoc       86, 96, 100         \mtoc@star       185, 198         \mtoc@start@next       91, 96, 97, 100, 101         \mtoc@start@toc       91, 104         \mtoc@starttoc       8, 117         \mtoc@tableofcontents       9, 116         \mtoc@tmp       58, 72, 74         \mtoc@tTOC       105, 108         \mtoc@toks       169, 205, 207, 212, 214-216         \mtoc@toks       169, 205, 207, 212, 214-216         \mtoc@TOPLevel       16, 59, 144         \mtoc@Zero       13, 95, 186, 199         \mtocCL       50, 53, 57, 106, 110, 150         \mtocgobble       2, 14         \mtoclabel       6, 125         \mtocref       6, 131, 141	S   SECNUM
\mtoc@PW       212, 217         \mtoc@rgi       139-141, 148         \mtoc@sec       62, 63, 148         \mtoc@st@rttoc       86, 96, 100         \mtoc@star       185, 198         \mtoc@start@next       91, 96, 97, 100, 101         \mtoc@start@toc       91, 104         \mtoc@starttoc       8, 117         \mtoc@tableofcontents       9, 116         \mtoc@tmp       58, 72, 74         \mtoc@toc       105, 108         \mtoc@toks       169, 205, 207, 212, 214-216         \mtoc@tOC       13, 95, 186, 199         \mtocCL       50, 53, 57, 106, 110, 150         \mtocgobble       2, 14         \mtoclabel       6, 125	S   SECNUM
\mtoc@PW	S   SECNUM

\sl@subparagraph 37, 42	\TOCLevels 3, 19, 21, 27, 32
\sl@subsection 36, 39	\TOPLevel 3, 15, 19
\sl@subsubsection	\TOPLevelNum 16, 52, 142
\sl@tocrmarg 183, 194, 213	
	$\mathbf{X}$
${f T}$	\x 15, 17, 158, 203, 205
\tableofcontents 9, 112	
\thepage 99	Y
\TOCEntryNum	\y 204, 206
4 Change History	
v1.2 (2018/08/29)	v1.4 (2018/08/29)
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