L'extension tocbibind*

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Résumé

L'extension tocbibind peut être utilisée pour ajouter en table des matières des entrées sur des éléments comme une bibliographie ou un index. L'extension est pensée pour fonctionner avec les quatre classes standards book, report, article et proc comme pour s'utiliser de façon limitée avec la classe ltxdoc. Les résultats avec d'autres classes peuvent être problématiques. Cette extension a été testée avec l'extension tocloft mais n'a pas été testée avec d'autres extension qui changent la définition des commandes \chapter* ou \section*.

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1 Introduction

Des questions pour ajouter la bibliographie dans les entrées de la table des matières semblent surgir assez régulièrement sur le forum comp.text.tex.

L'extension tocbibind fournit une solution pour insérer automatiquement des références à une bibliographie, un index ou tout élément titré d'un document

^{*}Ce fichier (tocbibind-fr.dtx) ayant pour numéro de version v1.5k date du 13/10/2010.

en table des matières (tocbibind est censé être une abréviation pour « Table of Contents¹, Bibliography, Index, etc.).

Certaines parties de l'extension ont été développées en tant que part d'une classe et d'un ensemble d'extensions traitant de la composition de documents au standard ISO [Wil96]. Ce manuel est réalisé conformément aux conventions de l'utilitaire LATEX DOCSTRIP qui permet l'extraction automatique du fichier source contenant les macros LATEX [GM05].

La section 2 décrit l'utilisation de l'extension. Son code source est, quant à lui, détaillé dans la section 3.

2 L'extension tocbibind

L'extension tocbibind permet aux titres de la table des matières, de la liste des figures, de la liste des tables, de la bibliographie et de l'index de figurer comme entrées dans la table des matières. Par défaut, tous ces éléments, s'ils existent, seront incorporés dans la table des matières. Les options d'extension sont disponibles pour empêcher ces ajouts :

- notbib désactive l'ajout de la bibliographie;
- notindex désactive l'ajout de l'index (l'ajout de l'index pour un document de classe ltxdoc est désactivé systématiquement);
- nottoc désactive l'ajout de la table des matières;
- notlot désactive l'ajout de la Liste des tableaux;
- notlof désactive l'ajout de la Liste des figures;
- chapter fait utiliser des titres de niveau « chapitre », si possible;
- section fait utiliser des titres de niveau « section », si possible;
- numbib numérote le titre de la bibliographie (par défaut, il n'y a pas de numéro).
- numindex numérote l'index (par défaut, il n'y a pas de numéro);
- other utilise une commande de titre non usuelle. Cette option implique l'utilisation de la commande \tocotherhead;
- none désactive tout.

Cette extension est conçue pour fonctionner avec les classes de documents IATEX standards, à savoir book, report, article, proc et ltxdoc (qui se base dans une large mesure sur la classe article). Dans les classes article, proc et ltxdoc, IATEX recourt au style de titre \section* pour la bibliographie et assimilées, tandis que pour les deux autres classes, il recourt au style de titre \chapter*. En l'occurrence, tocbibind suit ces conventions. Cependant, si l'extension est associée à une autre classe (telle une classe pour composer des thèses ayant des conventions différentes), alors les options chapter ou section peuvent être utilisées pour sélectionner le style approprié (mais la classe doit définir \chapter* et \@makeschapterhead, ou \section* respectivement).

Les classes standards, exception faite de l'txdoc, présentent une fonctionnalité avec laquelle la hauteur du titre de l'index diffère de celle des autres sections dans

^{1.} N.D.T. : table des matières.

un document (bug de LATEX 3126). L'extension tocbibind désactive cette fonctionnalité. Cette désactivation a un effet secondaire : les longueurs \columnseprule et \columnsep peuvent être réglées via \setlength pour modifier l'espace séparant les deux colonnes de l'index et l'épaisseur de la règle placée dans cet espace. L'effet de l'option none revient à limiter les modifications à la seule désactivation de cette fonctionnalité standard.

\tocotherhead

Dans les classes standards de LATEX, les titres de la bibliographie et de l'index sont soit définis en terme de commande \chapter* ou en terme de commande \section*. L'extension retient pour hypothèse que toute classe, autre que les classes standards déjà citée, utilise soit le code des classes standards pour implémenter la bibliographie et autres titres ou utilise un code très similaire. Certaines classes (et peut-être aussi des extensions) modifient les noms des commandes de sectionnement. Un exemple dont j'ai connaissance se sert de \clause au lieu de \section, \sclause au lieu de \subsection et ainsi de suite. Si les titres de votre document sont définis comme cela et que le même niveau de titre est utilisé pour la bibliographie et assimilées alors vous pouvez utiliser l'option other et la commande \tocotherhead{\chapter commande-de-titre}} pour traiter ce point. Si votre document utilise \clause alors indiquez \tocotherhead{clause} dans le préambule après avoir chargé l'extension. L'extension suppose alors que le titre de la bibliographie est défini en terme de \clause*.

Si vous utilisez la commande \tocotherhead, elle prime sur les options chapter et section.

\tocbibname

\setindexname \settocname

\settocbibname

\setlotname \setlofname

L'extension essaye de récupérer le nom de la bibliographie dans les définitions de la classe (notez que la classe article et ses dérivées stocke ce nom dans la commande \refname tandis que les classes book et report stocke ce nom dans \bibname). Cette extension stocke le nom de la bibliographie dans \tocbibname.

Ces commandes définissent les textes des titres pour l'index, la liste des tables et la liste des figures. Lors de l'utilisation des trois classes standards, le texte du titre est tiré respectivement des commandes \indexname, \contentsname, \listtablename et \listfigurename Les titres de texte peuvent être changés en modifiant les commandes standards ou en se servant de \setindexname{ $\langle nom \rangle$ } pour l'index et les commandes similaires pour les autres titres. De fait, les deux lignes suivantes ont le même effet :

\renewcommand{\listfigurename}{Figures}
\setlofname{Figures}

Notez que ces commandes remplacent les commandes \toc...name présentes en version 1.1.

2.1 Numérotation de la liste des figures et autres

Certains auteurs apprécient ou sont contraints de numéroter les titres des « Liste de ». Quelques commandes sont fournies pour simplifier cet usage.

Dans les documents avec chapitre, les titres de type « Liste de » sont composés comme des \chapter*{}. La manière naturelle d'obtenir des titres numérotés

\simplechapter \simplechapterdelim \restorechapter

serait de les composer comme des \chapter{} mais ceci a l'inconvénient potentiel que le mot « Chapitre », ou équivalent, apparaisse devant le titre, ce qui n'est probablement pas souhaité. $The \simplechapter[\langle name \rangle]$ command modifies any subsequent \chapter commands so that the result looks like that of \chapter* except that the chapter number is put on the same line as the title and the value of \simplechapterdelim is typeset immediately after the number. By default, \simplechapterdelim is empty. If the optional $\langle name \rangle$ argument is present, the $\langle name \rangle$ is typeset before the number. For example :

```
\renewcommand{\simplechapterdelim}{:}
\simplechapter[Chap]
```

will result in \chapter{First chapter} being typeset like:

Chap 1: First chapter.

The \restorechapter command resets any subsequent \chapter commands to their default behaviour.

\tocchapter \tocsection

Internally, the Listof commands in the tocbibind package use \toc@chapter for typesetting the Listof headings in chaptered documents and \toc@section for non-chaptered documents. The \tocchapter command modifies the \toc@chapter command to use a 'simple chapter' heading. The \tocsection command modifies \toc@section to typeset using \section instead of \section*.

For example, to get a numbered List of Figures heading in a chaptered document, put the following in the preamble :

```
\renewcommand{\listoffigures}{\begingroup
  \tocchapter
  \tocfile{\listfigurename}{lof}
\endgroup}
```

while to get a numbered List of Tables in a non-chaptered document :

```
\renewcommand{\listoftables}{\begingroup
   \tocsection
   \tocfile{\listtablename}{lot}
\endgroup}
```

More generally, to number the Table of Contents in a (non-)chaptered document you can do :

```
\renewcommand{\tableofcontents}{\begingroup
   \tocsection
   \tocchapter
   \tocfile{\contentsname}{toc}
\endgroup}
```

The \begingroup \endgroup pairing keeps the changes local.

2.2 Page styles

The package, by default, supports the standard empty, plain, and headings page styles. Other page styles, for example ones you specify yourself via the fancyhdr package, are indirectly supported.

As an example, assume that you are using the fancyhdr package and you use a fancy pagestyle in a book/report class document like :

```
\pagestyle{fancy}
\renewcommand{\chaptermark}[1]{\markboth{\thechapter.\ #1}{}}
```

then you will find that the chapter titles in headers are in normalcase but the ToC, etc., headers are still in uppercase.

\tocetcmark

In this package, the marks for the ToC, LoF...headers are specified via the command \tcommand To match the fancy pagestyle this must be redefined, like:

```
\pagestyle{fancy}
\renewcommand{\chaptermark}[1]{\markboth{\thechapter.\ #1}{}}
\renewcommand{\tocetcmark}[1]{\markboth{#1}{}}
```

which will give normalcase headers for the ToC, LoF.... As these are not normally numbered, it would be a misjudgement to try and get a non-existent chapter number into the header.

Documents with sections, but not chapters, can be treated in a similar manner by redefining \tocetcmark appropriately.

2.3 Package Defined Listof...

There are packages, such as listings and ccaption, that provide new Listof lists. These can be handled by the tocbibind package in a similar manner to the usual Listofs. Two examples are given below.

The listings package version 0.2 provides a \lstlistoflistings command to print a list of listings. The header name for this list is in \lstlistingname and the listing file has the extension lol. This can be treated just like the \listoffigure, etc., commands. To add the List of Listings header to the ToC do:

```
\renewcommand{\lstlistoflistings}{\begingroup
   \tocfile{\lstlistingname}{lol}
  \endgroup}
and to number the Listof heading do:
```

```
\renewcommand{\lstlistoflistings}{\begingroup
  \tocsection
  \tocchapter
  \tocfile{\lstlistingname}{lol}
\endgroup}
```

The ccaption package enables authors to define new kinds of floats (together with their captions) and Listof for each new kind of float. The command to define a new float is essentially $\ensuremath{\verb|newfloatlist{\langle fenv\rangle}{\langle ext\rangle}{\langle listname\rangle}{\langle capname\rangle}{\rangle}},$ where $\langle fenv\rangle$ is the name of the new float environment and $\langle ext\rangle$ is the file extension for the listof file. The typesetting of the Listof listing is called by the command $\ensuremath{\verb|listoffenv|}$, where fenv is the name $\langle fenv\rangle$. For example, a new float environment for diagrams could be defined via

\newfloatlist{diagram}{dia}{List of Diagrams}{Diagram}, and the Listof
called for by

\listofdiagram

In this case, to add the 'List of Diagrams' to the ToC it is necessary to define a new list of command, and use this in place of the \listoffenv. For the diagram example this could be (unnumbered):

```
\newcommand{\listofdia}{\begingroup
   \tocfile{List of Diagrams}{dia}
\endgroup}

and correspondingly for a numbered version :
   \newcommand{\listofdia}{\begingroup
   \tocsection
   \tocchapter
   \tocfile{List of Diagrams}{dia}
   \endgroup}
```

and then use \listofdia instead of \listofdiagram.

2.4 Abstracts

On rare occasions a publisher may want an abstract listed in the ToC. This package does not provide for that, partly because it is easier to do than the other headings. Just proceed along the lines below, where section might have to be chapter, and if you are using the hyperref package you have to use the \phantomsection macro.

```
\begin{abstract}
% \phantomsection % required if using hyperref
\addcontentsline{toc}{section}{\abstractname}
... rest of the abstract
```

3 Le code de l'extension

Announce the name and version of the package, which requires LaTeX 2_{ε} . 1 (*usc)

```
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{tocbibind}[2010/10/13 v1.5k extra ToC listings]
```

\PRWPackageNote \PRWPackageNoteNoLine

These two commands write a package Note to the terminal and log file. Use as $\PRWPackageNote{\langle package\ name \rangle}{\langle note\ text \rangle}$. The NoLine version does not show the line number. The commands are intermediate between the kernel \PackageWarning and \PackageInfo commands. I have provided them as other packages (of mine) may also incorporate them. The code is based on lterror.dtx.

```
packages (of mine) may also incorporate them. The code is based on lterror.dtx.
                 4 \providecommand{\PRWPackageNote}[2]{%
                     \GenericWarning{%
                       (#1)\@spaces\@spaces\@spaces
                 6
                    }{%
                       Package #1 Note: #2%
                 9
                     }%
                10 }
                11 \providecommand{\PRWPackageNoteNoLine}[2]{%
                    \PRWPackageNote{#1}{#2\@gobble}%
                13 }
                14
     \@bibquit
                We need to know what sectional divisions are supported.
\if@bibchapter
                15 \newcommand{\@bibquit}{}
                16 \newif\if@bibchapter
                17 \@ifundefined{chapter}{%
                    \@bibchapterfalse
                18
                    \@ifundefined{section}{%
                19
                       \PackageWarning{tocbibind}%
                         {I don't recognize any sectional divisions.\MessageBreak
                          I hope you have used the 'other' option\MessageBreak
                22
                          otherwise I'll ignore the package}
                24
                       \renewcommand{\@bibquit}{\endinput}
                       }{\PackageInfo{tocbibind}{The document has section divisions}}
                26
                    }{\@bibchaptertrue
                       \PackageInfo{tocbibind}{The document has chapter divisions}}
                27
  \if@inltxdoc This is used as a flag for the ltxdoc class. This has a particular kind of index that
                I am not going to mess with.
                29 \newif\if@inltxdoc
                30 \@ifclassloaded{ltxdoc}{\@inltxdoctrue}{\@inltxdocfalse}
  \if@dotocbib A set of booleans for deciding what is to go into the ToC. By default add every-
  \if@dotocind thing.
  \if@dotoctoc 32 \newif\if@dotocbib\@dotocbibtrue
  \if@dotoclot 33 \newif\if@dotocind\@dotocindtrue
  \if@dotoclof 34 \newif\if@dotoctoc\@dotoctoctrue
                35 \newif\if@dotoclot\@dotoclottrue
                36 \newif\if@dotoclof\@dotocloftrue
```

37

70

```
A set of booleans for deciding whether or not to produce numbered headings
                     (default is to do unnumbered headings).
    \if@donumindex
                     38 \newif\if@donumbib\@donumbibfalse
                     39 \newif\if@donumindex\@donumindexfalse
\if@dot@cb@bsection
                     If TRUE, use a section heading for the bibliography no matter what the main
                     document divisions are.
                     40 \newif\if@dot@cb@bsection\@dot@cb@bsectionfalse
                        Now we can do the options. Most of them are easy.
                     42 \DeclareOption{section}{\@bibchapterfalse}
                     43 \DeclareOption{notbib}{\@dotocbibfalse}
                     44 \DeclareOption{notindex}{\@dotocindfalse}
                     45 \DeclareOption{nottoc}{\@dotoctocfalse}
                     46 \DeclareOption{notlot}{\@dotoclotfalse}
                     47 \DeclareOption{notlof}{\@dotocloffalse}
                     48 \DeclareOption{numbib}{\@donumbibtrue}
                     49 \DeclareOption{numindex}{\@donumindextrue}
                     The chapter option needs to check whether or not the chapter heading commands
                     are defined. If they are not, then go with the section level headings.
                     51 \DeclareOption{chapter}{%
                         \if@bibchapter\else
                            \PackageWarning{tocbibind}%
                                           {Chapters are undefined, using section instead}
                         \fi}
                        The other option makes \Obibquit a no-op and cancels any chapter based
                     processing.
                     57 \DeclareOption{other}{\renewcommand{\@bibquit}{}
                                              \@bibchapterfalse}
                        The none option turns everything off.
                     59 \DeclareOption{none}{%
                         \@dotocbibfalse
                     60
                          \@dotocindfalse
                         \@dotoctocfalse
                         \@dotoclotfalse
                     64
                         \@dotocloffalse
                         \@donumbibfalse
                         \@donumindexfalse
                     66
                     67 }
                        Process the options now, and then quit if necessary.
                     68 \ProcessOptions\relax
                     69 \@bibquit
```

Issue a note about the heading style being used.

```
71 \if@bibchapter
72 \PRWPackageNoteNoLine{tocbibind}{Using chapter style headings, unless overridden}
73 \else
74 \PRWPackageNoteNoLine{tocbibind}{Using section or other style headings}
75 \fi
Ensure that the index is not processed if it is an ltxdoc class.
76 \if@inltxdoc \@dotocindfalse \fi
77
```

\@tocextra \tocotherhead

 $\langle \mathtt{Otocextra}$ is the internal command to store the heading command name. $\langle \mathtt{name} \rangle$ is the user command to set the heading command $\langle \mathtt{name} \rangle$ (without the backslash). The default is section.

78 \newcommand{\@tocextra}{section}
79 \newcommand{\tocotherhead}[1]{\renewcommand{\@tocextra}{#1}}

\tocetcmark
\prw@mkboth
\toc@section
\toc@headstar

Utility macros, as the code that they represent gets used several times over. They deal with marking for page headers (code taken from classes.dtx), and adding starred sectional headings to the ToC.

 \t ocetcmark $\{\langle text \rangle\}$ is the default mark code as called by sectional headings.

- 81 \newcommand{\tocetcmark}[1]{%
- 82 \@mkboth{\MakeUppercase{#1}}{\MakeUppercase{#1}}}

\prw@mkboth{ $\langle text \rangle$ } is used later for the ToC headings.

83 \newcommand{\prw@mkboth}[1]{\tocetcmark{#1}}

 $\colon{section{$\langle sec \rangle$}}{\langle text \rangle$}$ is a generalised version of $\sc*{\langle text \rangle$}$ which also makes an entry of $\langle text \rangle$ into the ToC, where $\langle sec \rangle$ is the name of a sectional division (with no backslash). $\colono{section}{\langle sec \rangle}{\langle text \rangle}$ is similar except that it makes no entry into the ToC.

```
84 \newcommand{\toc@section}[2]{\%
85 \@nameuse{\pmu1}*{\pmu2\prw@mkboth{\pmu2\}}
86 \addcontentsline{\toc}{\pmu1}\{\pmu2\}}
87 \newcommand{\toc@headstar}[2]{\pmu8\}
88 \@nameuse{\pmu1}*{\pmu2\}}
```

\toc@chapter

 $\color{chapter}{\langle text \rangle}$ is equivalent to $\color{chapter}{\langle text \rangle}$ except that it makes an entry into the ToC

Until version 1.5f the chapter part of the code was \chapter*{#1\prw@mkboth{#1}}. On 2003/03/12 James Szinger 2 wrote that this failed for a bibliography in a two column book; the page headings for the previous chapter continued through the bibliography! James suggested that the mark part should be moved outside the chapter part (as is now done). I have no idea why there should have been this problem. As part of looking at it I even replaced the \toc@chapter as used in

^{2.} szinger@lanl.gov

the thebibliography environment with the standard book class definition, which failed as well.

```
89 \newcommand{\toc@chapter}[1]{%
    \chapter*{#1}\prw@mkboth{#1}
    \addcontentsline{toc}{chapter}{#1}}
```

\tocbibname

This holds the text for the Bibliography heading. We try and get the text from the class (either \bibname or \refname).

```
92 \ifx\bibname\undefined
     \ifx\refname\undefined
       \newcommand{\tocbibname}{References}
95
96
       \newcommand{\tocbibname}{\refname}
    \fi
97
98 \setminus else
   \newcommand{\tocbibname}{\bibname}
100 \fi
```

\setindexname \settocname

The remaining heading texts are simpler as we only need to check if their respective names are defined in the class. Note that these commands in version 1.2 have been \setlotname changed from version 1.1 in order to integrate with the tocloft package (which \setlofname operates with the \contentsname etc commands).

```
\verb|\settocbibname| 101 \\ | providecommand{\indexname} {Index}|
               102 \newcommand{\setindexname}[1]{\renewcommand{\indexname}{#1}}
               103 \providecommand{\contentsname}{Contents}
               104 \newcommand{\settocname}[1]{\renewcommand{\contentsname}{\#1}}
               105 \providecommand{\listtablename}{List of Tables}
               106 \newcommand{\setlotname}[1]{\renewcommand{\listtablename}{#1}}
               107 \providecommand{\listfigurename}{List of Figures}
                108 \newcommand{\setlofname}[1]{\renewcommand{\listfigurename}{#1}}
                109 \newcommand{\settocbibname}[1]{\renewcommand{\tocbibname}{#1}}
```

The rest is just hacking the various environments and commands from classes.dtx.

Following a suggestion by Donald Arseneau (CTT, 'Re: memoir, natbib, and chapterbib', 9 Jan 2003), use \bibsection as a hook into thebibliography for the style of the heading.

\t@cb@bchapsection Internal macros holding the heading for thebibliography.

```
\verb|\t@cb@bsection||_{110} \\ \verb|\newcommand{t@cb@bchapsec}{\command{t}}
                         \if@bibchapter
                           \if@donumbib
                             \chapter{\tocbibname}%
                  114
                           \else
                             \toc@chapter{\tocbibname}%
                  116
                         \else
                           \if@donumbib
                  118
```

```
119 \@nameuse{\@tocextra}{\tocbibname}%
120 \else
121 \toc@section{\@tocextra}{\tocbibname}%
122 \fi
123 \fi}
124 \newcommand{\t@cb@bsection}{%
125 \if@donumbib
126 \@nameuse{\@tocextra}{\tocbibname}%
127 \else
128 \toc@section{\@tocextra}{\tocbibname}%
129 \fi}
130
```

Redefine thebibliography, but only if requested. Take care that the natbib package has not already modified the environment, noting that natbib defines and uses \bibsection.

```
131 \if@dotocbib
```

```
132 \@ifpackageloaded{natbib}{}{% natbib not loaded
```

The natbib package has not been used (yet), so go ahead and change the environment.

\bibsection Macro holding heading for thebibliography.

```
133 \newcommand{\bibsection}-{\t@cb@bchapsec}
```

```
thebibliography
```

```
134 \renewenvironment{thebibliography}[1]{%
135 \bibsection
136 \begin{thebibitemlist}{#1}}{\end{thebibitemlist}}}
```

thebibitemlist

Just as a matter of style, I have extracted the list making code from the definition of the thebibliography. It might also make it easier for someone to change the list environment. The code is a straight copy from classes.dtx.

```
\newenvironment{thebibitemlist}[1]{
       \list{\@biblabel{\@arabic\c@enumiv}}%
           \leftmargin\labelwidth
140
            \advance\leftmargin\labelsep
            \@openbib@code
            \usecounter{enumiv}%
            \let\p@enumiv\@empty
            \renewcommand\theenumiv{\@arabic\c@enumiv}}%
      \sloppy
146
147
      \clubpenalty4000
148
      \@clubpenalty \clubpenalty
149
      \widowpenalty4000%
      \sfcode '\.\@m}
      {\def\@noitemerr
       {\@latex@warning{Empty 'thebibliography' environment}}%
```

```
\endlist}
```

\sectionbib

The chapterbib package defines a macro \sectionbib which, if its sectionbib option is used, it calls at the beginning of the document to fiddle with the thebibliography environment (but it doesn't work when it is renewed as above). We need to disable the macro because we do our own fiddling

```
\@ifpackagewith{chapterbib}{sectionbib}%
156
       {\renewcommand{\sectionbib}[2]{}}%
157
       {}
```

This is the end of \if@dotocbib.

```
159 \fi
160
```

At the end of the preamble we have to check if the natbib and/or chapterbib packages have been loaded after the tocbibind package. If this is the case, we have to make sure that we have control with respect to their sectionbib options.

```
161 \AtBeginDocument{%
     \@ifpackagewith{natbib}{sectionbib}{\@dot@cb@bsectiontrue}{}
```

If the chapterbib package was loaded before tocbibind we have already killed \sectionbib. If chapterbib has been loaded afterwards we must kill \sectionbib now before it gets used.

```
\@ifpackagewith{chapterbib}{sectionbib}%
  {\@dot@cb@bsectiontrue
  \@ifundefined{sectionbib}{}{\def\sectionbib#1#2{}}}%
  {}
```

Lastly, use our definition of \bibsection for the thebibliography environment.

```
\if@dotocbib
169
       \if@dot@cb@bsection
         \renewcommand{\bibsection}{\t@cb@bsection}%
172
         \renewcommand{\bibsection}{\t@cb@bchapsec}%
       \fi
     \fi
174
```

This is the end of \AtBeginDocument

```
175 }
```

theindex In an earlier version of this package, for reasons that I didn't understand, I had to add/remove some vertical space around the Index heading to make its height match other chapter/section headings. In an unrelated thread on the comp.text.tex newsgroup, Donald Arseneau pointed out that this effect was a known feature of the standard classes and recorded as latex bug 3126, and was caused by misplaced topskips. The following removes this feature for all except the doc class. The first bit of code is a copy from classes.dtx.

```
177 \if@inltxdoc\else
178 \renewenvironment{theindex}%
179 {\if@twocolumn
180 \@restonecolfalse
181 \else
182 \@restonecoltrue
```

This next bit is where we make the package changes. Note that in the default definition the values for \columnseprule and \columnsep were set at this point to be Opt and 35pt respectively. They are not set in this definition so that they can be adjusted by the user, if necessary, before starting the environment.

```
\if@bibchapter
184
           \if@donumindex
              \refstepcounter{chapter}
186
              \twocolumn[\vspace*{2\topskip}%
187
                         \@makechapterhead{\indexname}]%
188
              \addcontentsline{toc}{chapter}{\protect\numberline{\thechapter}\indexname}
189
              \chaptermark{\indexname}
190
           \else
              \if@dotocind
                \twocolumn[\vspace*{2\topskip}%
                           \@makeschapterhead{\indexname}]%
                \prw@mkboth{\indexname}
                \addcontentsline{toc}{chapter}{\indexname}
                \twocolumn[\vspace*{2\topskip}%
                           \@makeschapterhead{\indexname}]%
199
200
                \prw@mkboth{\indexname}
             \fi
201
           \fi
202
        \else
           \if@donumindex
204
              \twocolumn[\vspace*{-1.5\topskip}%
206
                         \@nameuse{\@tocextra}{\indexname}]%
207
             \csname \@tocextra mark\endcsname{\indexname}
              \if@dotocind
                \twocolumn[\vspace*{-1.5\topskip}%
                           \toc@headstar{\@tocextra}{\indexname}]%
211
                \prw@mkboth{\indexname}
212
                \addcontentsline{toc}{\@tocextra}{\indexname}
214
                \twocolumn[\vspace*{-1.5\topskip}%
215
216
                           \toc@headstar{\@tocextra}{\indexname}]%
                \prw@mkboth{\indexname}
             \fi
218
219
           \fi
220
        \fi
```

Now we are back to the original code.

```
221 \thispagestyle{plain}\parindent\z@
222 \parskip\z@ \@plus .3\p@\relax
223 \let\item\@idxitem}
224 {\if@restonecol\onecolumn\else\clearpage\fi}
225 \fi
```

\toc@start These two macros deal with the start and finish of the \tableofcontents and \toc@finish friends by adjusting the column settings if need be.

```
227 \newcommand{\toc@start}{%
228
     \if@bibchapter
       \if@twocolumn
         \@restonecoltrue\onecolumn
230
231
       \else
         \@restonecolfalse
       \fi
     fi
234
235
236 \newcommand{\toc@finish}{%
     \if@bibchapter
       \if@restonecol\twocolumn\fi
238
     \fi}
```

The code for \tableofcontents, \listoftables and \listoffigures is virtually identical in each case, except for the heading text. \tocfile embodies the common code. This is virtually a parameterized copy from classes.dtx, except that it handles the differences between the article class and the other two, and incorporates the code for additions to the ToC. It is a useful hook if any other package wants to extend tocbibind for other kinds of listings.

The command is $\tcfile{\langle head-text\rangle}$ { $\langle file-extension\rangle$ }, where $\langle head-text\rangle$ is the heading (e.g., List of Figures) and $\langle file-extension\rangle$ is the file extension (e.g., lof).

```
240 \newcommand{\tocfile}[2]{%
241 \toc@start

The next bit is for the heading changes.
242 \if@bibchapter
243 \toc@chapter{#1}
244 \else
245 \toc@section{\@tocextra}{#1}
246 \fi

And finish up with a parameterized call to start the listing and tidy up.
247 \@starttoc{#2}
248 \toc@finish}
```

\tableofcontents If requested, we redefine this command, using \tocfile to do all the work for us.

```
250 \if@dotoctoc
                   \renewcommand{\tableofcontents}{%
               251
                       \tocfile{\contentsname}{toc}
               253
               254 \fi
\listoftables This is almost identical to the code for \tableofcontents
               256 \if@dotoclot
               257 \renewcommand{\listoftables}{%
                      \tocfile{\listtablename}{lot}
               259
               260 \fi
               261
\listoffigures This is almost identical to the code for \tableofcontents
               262 \if@dotoclof
               263 \renewcommand{\listoffigures}{%
                      \tocfile{\listfigurename}{lof}
               264
               265
               266 \fi
               267
```

\simplechapter \restorechapter \simplechapterdelim

The \simplechapter command modifies the \@makechapterhead command to result in an appearance akin to \@makeschapterhead, and is based on the latter. The \restorechapter command restores everything back to its original state. The value of \simplechapterdelim is appended to the chapter number before the title text.

```
268 \newcommand{\simplechapter}[1][\@empty]{%
     \let\@tbiold@makechapterhead\@makechapterhead
     \renewcommand{\@makechapterhead}[1]{%
       271
        {\parindent \z@ \raggedright
        \normalfont
274
        \interlinepenalty\@M
        \Huge\bfseries #1\space\thechapter\simplechapterdelim\space
            ##1\par\nobreak
        \vskip 40\p@
      }}
278
280 \newcommand{\restorechapter}{%
     \@ifundefined{@tbiold@makechapterhead}{}%
281
     {\let\@makechapterhead\@tbiold@makechapterhead}
282
283 }
284 \mbox{ \newcommand{\simplechapterdelim}{}} \label{lem:simplechapterdelim} \\
```

\tocchapter These two commands modify the \toc@chapter and \toc@section commands to \tocsection make numbered Listof headings.

```
286 \newcommand{\tocchapter}{%
287 \providecommand{\@makechapterhead}{}
288 \simplechapter
289 \renewcommand{\toc@chapter}[1]{\chapter{##1}}
290 }
291 \newcommand{\tocsection}{%
292 \renewcommand{\toc@section}[2]{\@nameuse{##1}{##2}}
293 }
294

The end of this package.
295 \(/usc\)
```

Références

[GM05] Michel Goossens et Frank Mittelbach. La TeX Companion, $2^{\rm e}$ éd., Pearson, 2005.

[Wil96] Peter R. Wilson. LaTeX for standards: The LaTeX package files user manual. NIST Report NISTIR, juin 1996.

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