

# The `latex-lab-toc-hyperref-changes` package

## Changes and additions to `hyperref` related to toc entries

L<sup>A</sup>T<sub>E</sub>X Project\*

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**Abstract**

## 1 Introduction

The followings contains various change needed for `hyperref` for the new toc tagging code. They should be only loaded if `hyperref` is used!

1 `<*package>`

## 2 Changes for `hyperref`

### 2.1 `\contentsline`, `\addcontentsline`

The standard `\contentsline` and `\addcontentsline` should also be used with `hyperref` (together with more changes below) so we have to disable the redefinition in `hyperref` (this requires `hyperref` version 7.00v!

```
2 \def\hyper@nopatch@toc{}
3 \AddToHook{package/hyperref/after}
4 {
5   \ifpackage@later{hyperref}{2023-02-07}{}
6   {\PackageWarning{latex-lab-testphase-toc-tagging}{hyperref too old}{}
7 }
```

### 2.2 Add links to toc entries

```
8 \ExplSyntaxOn
9 \AddToHook{package/hyperref/after}
10 {
11   \AddToHookWithArguments{contentsline/text/before}[hyp]
12   {
13     \tl_if_blank:nF {#2}%text
14     {
15       \tl_if_blank:nF {#4}%destination
16       {
17         \int_case:nnF {\Hy@linktoc}
```

---

\*Initial implementation done by Ulrike Fischer

```

18         {
19             {0}{ } %none
20             {1}{\hyper@linkstart{link}{#4}} %section
21             {2}{ } %page
22         }
23         {\hyper@linkstart{link}{#4}} %all
24     }
25 }
26 }
27 \AddToHookWithArguments{contentsline/text/after}[hyp]
28 {
29     \tl_if_blank:nF {#2}
30     {
31         \tl_if_blank:nF {#4}
32         {
33             \int_case:nnF {\Hy@linktoc}
34             {
35                 {0}{ } %none
36                 {1}{\hyper@linkend} %section
37                 {2}{ } %page
38             }
39             {\hyper@linkend} %all
40         } % none
41     }
42 }
43
44 \AddToHookWithArguments{contentsline/page/before}[hyp]
45 {
46     \tl_if_blank:nF {#3}
47     {
48         \tl_if_blank:nF {#4} %
49         {
50             \int_case:nnF {\Hy@linktoc}
51             {
52                 {0}{ } %none
53                 {1}{ } %section
54                 {2}{\hyper@linkstart{link}{#4}} %page
55             }
56             {\hyper@linkstart{link}{#4}} %all
57         } % none
58     }
59 }
60 \AddToHookWithArguments{contentsline/page/after}[hyp]
61 {
62     \tl_if_blank:nF {#3}
63     {
64         \tl_if_blank:nF {#4}
65         {
66             \int_case:nnF {\Hy@linktoc}
67             {
68                 {0}{ } %none
69                 {1}{ } %section
70                 {2}{\hyper@linkend} %page
71             }

```

```

72         {\hyper@linkend} %all
73     } % none
74 }
75 }
76 \AddToHookWithArguments{cmd/addcontentsline/before}[hyp]
77 {%
78     \Hy@addcontentsline@addbookmark
79     {#1}
80     {#2}
81     {#3}%
82 }
83 }
84 \ExplSyntaxOff

```

### 2.3 Add bookmark code to \addcontentsline

```

85 \newcommand\Hy@addcontentsline@addbookmark[3]{#1 toc type, #2 level, #3 content
86     {%
87         \ifx\@currentHref\@empty
88             \Hy@Warning{%
89                 No destination for bookmark of \string\addcontentsline,%
90                 \MessageBreak destination is added%
91             }%
92             \phantomsection
93         \fi
94         \begingroup
95             \expandafter\ifx\csname toclevel@#2\endcsname\relax
96                 \begingroup
97                     \def\Hy@tempa{#1}%
98                     \ifx\Hy@tempa\Hy@bookmarkstype
99                         \Hy@WarningNoLine{%
100                             bookmark level for unknown #2 defaults to 0%
101                         }%
102                     \else
103                         \Hy@Info{bookmark level for unknown #2 defaults to 0}%
104                     \fi
105                 \endgroup
106             \expandafter\gdef\csname toclevel@#2\endcsname{0}%
107         \fi
108         \edef\Hy@toclevel{\csname toclevel@#2\endcsname}%
109         \Hy@writebookmark{\csname the#2\endcsname}%
110             {#3}%
111             {\@currentHref}%
112             {\Hy@toclevel}%
113             {#1}%
114         \ifHy@verbose
115             \begingroup
116                 \def\Hy@tempa{#3}%
117                 \@onelevel@sanitize\Hy@tempa
118                 \let\temp@online\on@line
119                 \let\on@line\@empty
120                 \Hy@Info{%
121                     bookmark\temp@online:\MessageBreak
122                     thecounter {\csname the#2\endcsname}\MessageBreak
123                     text {\Hy@tempa}\MessageBreak

```

```
124         reference {\@currentHref}\MessageBreak
125         toplevel {\Hy@toclevel}\MessageBreak
126         type {#1}%
127     }%
128 \endgroup
129 \fi
130 \endgroup
131 }
132 </package>
```