The **topiclongtable** package[*]
Autocollapsing cells in longtables

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This LaTeX package extends `longtable`s implementing `topiclongtable`s, in which vertically adjacent cells merge if and only if they have the same content and the cells on their left are merged. Furthermore the merging is well behaved, in that it does not happen after page breaks and correct separation lines are drawn automatically.

The typical use case is a table that spans multiple pages and contains a list of hierarchically organized topics (hence the package name).

Usage

To use the package install it in your tree (or put `topiclongtable.sty` in your work folder) and require it in your preamble:

```
\usepackage{topiclongtable}
```

Environment

topiclongtable

```
\begin{topiclongtable}{⟨column specification⟩}
  ⟨cells specification⟩
\end{topiclongtable}
```

The `topiclongtable` environment extends `longtable`. They share the same syntax and all features of the latter are available in the former.

To use **topiclongtable** macros you must *prepend* "`F`" to the first column specification and "`T`" to all others. You can omit the prefix only on columns following the last one that contains **topiclongtable** macros:

```
\begin{topiclongtable}{|Fl|Tl|Tl|Tr|l|r}
  % ...
\end{topiclongtable}
```

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[*]Development of this package was sponsored by Human Predictions, LLC (www.humanpredictions.com).

Macros

`\Topic[⟨content⟩]`

This is the main macro of the package; you can use it to wrap the optional ⟨*content*⟩ of a cell in order to allow it to merge with adjacent cells.

The behaviour of `\Topic` can be observed in the following complete example:

```
\begin{topiclongtable}{|Fl|Tl|Tl|l|}
  \Topic[Topic 1] & \Topic[Subtopic 1] & \Topic[Subsubtopic 1] & Foo \\
  \Topic          & \Topic            & \Topic[Subsubtopic 2] & Bar \\
  \Topic          & \Topic[Subtopic 1] & \Topic[Subsubtopic 2] & Baz \\
  \Topic[Topic 2] & \Topic[Subtopic 1] & \Topic[Subsubtopic 3] & Qux \\
  \Topic          & \Topic[Subtopic 2] & \Topic[Subsubtopic 4] & Zod \\
  \Topic          & \Topic            & \Topic                & Bop \\
\end{topiclongtable}
```

Topic 1	Subtopic 1	Subsubtopic 1	Foo
		Subsubtopic 2	Bar
			Baz
Topic 2	Subtopic 1	Subsubtopic 3	Qux
	Subtopic 2	Subsubtopic 4	Zod
			Bop

Here is a breakdown of the manifested behaviour:
- the parameter is optional;
- merging happens when it is omitted (rows 1–3 on column 1);
- merging happens when its value is equal to the one above (rows 2–3 on columns 2 and 3);
- merging does not happen (rows 3–4 on column 2) when the cells on the left are not merged (rows 3–4 on column 1).

`\TopicLine`

`\TopicLine` can be used at the start of a row to automatically draw the horizontal lines that separates it from the row above and correctly accounts for merged cells.

By default no horizontal lines are drawn on top and bottom of table chunks to allow for maximal flexibility. You can use longtable footer and headers to easily draw them (or whichever footer/header you may desire) as shown in the next example.

Here is the previous example with lines added:

```
\begin{topiclongtable}{|Fl|Tl|Tl|l|}
  \hline\endhead
  \hline\endfoot
  \TopicLine \Topic[T1] & \Topic[ST1] & \Topic[SST1] & Foo \\
  \TopicLine \Topic     & \Topic      & \Topic[SST2] & Bar \\
  \TopicLine \Topic     & \Topic[ST1] & \Topic[SST2] & Baz \\
  \TopicLine \Topic[T2] & \Topic[ST1] & \Topic[SST3] & Qux \\
  \TopicLine \Topic     & \Topic[ST2] & \Topic[SST4] & Zod \\
  \TopicLine \Topic     & \Topic      & \Topic       & Bop \\
\end{topiclongtable}
```

T1	ST1	SST1	Foo
		SST2	Bar
			Baz
T2	ST1	SST3	Qux
	ST2	SST4	Zod
			Bop

Settings

All settings described in this section are global and can be changed between tables.

`\TopicSetContinuationCode{⟨TEX code⟩}`

Cells *continuing* from the previous page can be explicitly marked. You can set a code fragment to append to such cells using `\TopicSetContinuationCode`:

```
\TopicSetContinuationCode{\ (cont.)}
```

By default no mark is appended and you can reset to the default using

```
\TopicSetContinuationCode{}
```

Consider this example across two pages:

```
\TopicSetContinuationCode{\ (cont.)}
\begin{topiclongtable}{|Fl|Tl|Tl|l|}
  \hline\endhead
  \hline\endfoot
  \TopicLine \Topic[A] & \Topic[B] &  1 \\
  \TopicLine \Topic    & \Topic    &  2 \\
% ...
  \TopicLine \Topic    & \Topic[C] & 10 \\
  \TopicLine \Topic    & \Topic    & 11 \\
% ...
  \TopicLine \Topic    & \Topic    & 20 \\
\end{topiclongtable}
```

A	B	1
		2
		3
		4
		5
		6
		7
		8
		9
	C	10
		11
		12
		13

A (cont.)	C (cont.)	14
		15
		16
		17
		18
		19
		20

\TopicSetVPos \TopicSetVPos{⟨*vertical position specification*⟩}

You can set the vertical position for \Topic cells by using \TopicSetVPos. Allowed ⟨*vertical position specification*⟩s are "b" (bottom), "c" (center) and the default "t" (top). All \Topic cells will align in the same way:

Here is an example of *bottom* alignment:

```
\TopicSetVPos{b}
\begin{topiclongtable}{|Fl|Tl|Tl|l|}
  \hline\endhead
  \hline\endfoot
  \TopicLine \Topic[T1] & \Topic[ST1] & Foo \\
  \TopicLine \Topic     & \Topic[ST2] & Bar \\
  \TopicLine \Topic     & \Topic      & Baz \\
\end{topiclongtable}
```

		SST1	Foo
			Bar
T1	ST1	SST2	Baz

\TopicSetWidth \TopicSetVPos{⟨*cell width specification*⟩}

You can set the width of the \Topic cells by using \TopicSetWidth. Allowed ⟨*cell width specification*⟩s are "=" (fit column width) and the default "*" (fit natural content width).

Note "=" will be useful mostly when coupled with column specifiers like p{⟨*width*⟩} to force the overflowing content inside the column width:

```
\TopicSetWidth{=}
\begin{topiclongtable}{|Fp{.5in}|Tl|}
  \hline\endhead
  \hline\endfoot
  \TopicLine \Topic[Fits column width] & A \\
  \TopicLine \Topic                    & B \\
  \TopicLine \Topic                    & C \\
\end{topiclongtable}
```

Fits column width	A
	B
	C

Index

The italic numbers denote the pages where the corresponding entry is described, numbers underlined point to the definition, all others indicate the places where it is used.