

Package `colortbl` and other Features

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August 15, 2003

1 Overview

Table 1: An overview, what's possible with `colortbl`

| | | | | |
|-----|-----|-----|---|---|
| | | | 1 | <code>\begin{tabular}{ c c >{\columncolor{red}}c}\hline</code> |
| | | | 2 | <code>\multicolumn{1}{ >{\columncolor[gray]{.8}[0pt]}c</code> |
| | | | | <code>}{1,1} &</code> |
| | | | 3 | <code>\multicolumn{1}{ >{\columncolor[gray]{.8}}c</code> |
| | | | | <code> }{2,1} &</code> |
| 1,1 | 2,1 | 3,1 | | <code>3,1\\\hline\hline</code> |
| 1,2 | 2,2 | 3,2 | 4 | |
| 1,3 | 2,3 | 3,3 | 5 | <code>1,2 & \multicolumn{1}{ >{\columncolor{blue}}c</code> |
| | | | | <code> }{2,2} &</code> |
| | | | 6 | <code>3,2\\\cline{2-2}\hline</code> |
| | | | 7 | <code>\rowcolor{yellow}1,3 & 2,3 & 3,3\\\hline</code> |
| | | | 8 | <code>\end{tabular}</code> |

Package `colortbl` is used to manipulate the background color of table rows and columns. The commands are:

```
\columncolor[<colormodel>]{<color>}[<left overhang>][<right overhang>]
\rowcolor ... same arguments ...
```

2 The Arguments

2.1 Columns

1. `\columncolor[gray]{0.5}` 1,1
with `>{\columncolor[gray]{0.8}}c` For „c” you can write „l” for left or „r” for right.

```

1 \begin{tabular}{>{\columncolor[gray]{0.8}}c}\hline
2   1,1\\\hline
3 \end{tabular}

```

2. `\columncolor{yellow}`
with `>{\columncolor{yellow}}c`

1,1

```

1 \begin{tabular}{>{\columncolor{yellow}}c}\hline
2   1,1\\\hline
3 \end{tabular}

```

3. `\columncolor{yellow}[5mm][10mm]`

1,1

with `>{\columncolor{yellow}[5mm][10mm]}c` This makes only sense if you like some white space between two cells like the following one:

```

1 \begin{tabular}{>{\columncolor{yellow}[5mm][10mm]}c}\hline
2   1,1\\\hline
3 \end{tabular}

```

| | |
|-----|-----|
| 1,1 | 2,1 |
| 1,2 | 2,2 |

The command for the first column is:

`>{\columncolor{yellow}[\tabcolsep][0.5\tabcolsep]}c`

and for the second one:

`>{\columncolor{yellow}[0.5\tabcolsep][\tabcolsep]}c`

```

1 \begin{tabular}{>{\columncolor{yellow}[\tabcolsep][0.5\tabcolsep]}c
   \tabcolsep]}c
2   >{\columncolor{yellow}[0.5\tabcolsep][\tabcolsep]}
   c}
3   1,1 & 2,1\\
4   1,2 & 2,2\\
5 \end{tabular}

```

2.2 Rows

For colored rows the `\rowcolor`-command must appear as first command in any row. The last example with a command `\rowcolor{red}` in the first column of the first line gives a table like the following one:

| | |
|-----|-----|
| 1,1 | 2,1 |
| 1,2 | 2,2 |

```

1 \begin{tabular}{>{\columncolor{yellow}[\tabcolsep][0.5\tabcolsep]}c
2   >{\columncolor{yellow}[0.5\tabcolsep][\tabcolsep]}c}

```

```

3   \rowcolor{red}1,1 & 2,1\\
4   1,2 & 2,2\\
5   \end{tabular}

```

The vertical borders are defined by the `\columncolor`-command and the horizontal ones by the `\rowcolor`-command. A `\rowcolor`-command overwrites a `\columncolor`-command!

2.3 Single cells

Coloring a single cell is not possible with the above described methods. You must define the **single** cell as a **multicol** cell.

```
\multicolumn{n}{c}{\columncolor{<color>} blah}
```

The first Table 1 has for the cell (2,2) the entry

```

1 \begin{tabular}{|c|c|>{\columncolor{red}}c}\hline
2   \multicolumn{1}{|>{\columncolor[gray]{.8}[0pt]}c}{1,1} &
3     \multicolumn{1}{|>{\columncolor[gray]{.8}}c|}{2,1} &
4     3,1\\\hline\hline
5   1,2 & \multicolumn{1}{|>{\columncolor{blue}}c|}{2,2} &
6     3,2\\\cline{2-2}\hline
7   \rowcolor{yellow}1,3 & 2,3 & 3,3\\\hline
8 \end{tabular}

```

3 Remarks

- A `\columncolor`-command is valid vor all cells in one column! Therefore you can write it in any f the available columns of all rows, lyx inserts the commands by default in all other cells of the same column.
- For more information look at the documentation of `colortbl`-package

4 Example

Figure 2 is another demonstartion of what is possible with package `colortbl` and it shows some other nice features.

```

1 [ ... ]
2 \usepackage{array}
3 \usepackage{colortbl}
4 \definecolor{myCol}{rgb}{1,0.95,0.95}

```

| | | |
|------|------|---------|
| blah | B1 | Carole |
| A2 | blub | C2 |
| A3 | B3 | blubber |
| A | B | C |

Table 2: Demo of colortbl and other features

```

5 %
6 \makeatletter
7 \def\markCell{\@ifnextchar[{\@markCelli}{\@markCellii}}
8 \def\@markCelli[#1]#2#3{
9     \hspace{0pt}\makebox[0pt][l]{%
10         \raisebox{-0.25\height}{\huge\textcolor[#1]{#2}{#3}}}%
11 }
12 \def\@markCellii#1#2{
13     \hspace{0pt}\makebox[0pt][l]{%
14         \raisebox{-0.25\height}{\huge\textcolor{#1}{#2}}}%
15 }
16 \makeatother
17
18 [...]
19
20 \begin{tabular}{c>{\columncolor{myCol}}cc}
21 \markCell{blue}{A1}blah
22   & B1
23   & \markCell[gray]{0.9}{C1}Carole\\
24 A2
25   & \markCell[gray]{0.75}{B2}blub
26   & \multicolumn{1}{>{\columncolor{red}}c}{C2}\\
27 \rowcolor[gray]{0.95}A3
28   & B3
29   & \markCell[gray]{0.9}{C3}blubber\\
30 A & B & C
31 \end{tabular}%

```