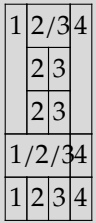
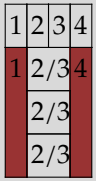
# Natural Tables

## in ConTEXt

## Examples




```
\bTABLE
\bTR \bTD[nr=3] 1 \eTD \bTD[nc=2] 2/3     \eTD \bTD[nr=3] 4 \eTD \eTR
\bTR                  \bTD 2 \eTD \bTD 3 \eTD                  \eTR
\bTR                  \bTD 2 \eTD \bTD 3 \eTD                  \eTR
\bTR \bTD[nc=3] 1/2/3                    \eTD \bTD 4       \eTD \eTR
\bTR \bTD 1       \eTD \bTD 2 \eTD \bTD 3 \eTD \bTD 4       \eTD \eTR
\eTABLE
```




```
\setupTABLE[1,4][2][background=color,backgroundcolor=red]
\bTABLE
\bTR \bTD 1        \eTD \bTD 2 \eTD \bTD 3 \eTD \bTD 4        \eTD \eTR
\bTR \bTD[nr=3] 1 \eTD \bTD[nc=2] 2/3     \eTD \bTD[nr=3] 4 \eTD \eTR
\bTR                   \bTD[nc=2] 2/3     \eTD                   \eTR
\bTR                   \bTD[nc=2] 2/3     \eTD                   \eTR
\eTABLE
```


```
\bTABLE[align={middle,lohi}]
\bTR \bTD 1 \eTD \bTD 2 \eTD \bTD 3 \eTD            \bTD 4 \eTD \eTR
\bTR \bTD 1 \eTD \bTD[nr=2,nc=2,color=red] 2/3 \eTD \bTD 4 \eTD \eTR
\bTR \bTD 1 \eTD                                    \bTD 4 \eTD \eTR
\bTR \bTD 1 \eTD \bTD 2 \eTD \bTD 3 \eTD            \bTD 4 \eTD \eTR
\eTABLE
```

| | | |
|---|---|---|
| aa | xx | cc |
| bb | | dd |

| | | | |
|---|---|---|---|
| aa | xx | cc | yy |
| bb | | dd | |

```
\hbox \bgroup \ignorespaces

\bTABLE
\bTR \bTD aa \eTD \bTD[nr=2] xx \eTD \bTD cc \eTD \eTR
\bTR \bTD bb \eTD                    \bTD dd \eTD \eTR
\eTABLE

\unskip \quad \ignorespaces

\bTABLE
\bTR \bTD aa \eTD \bTD[nr=2] xx \eTD \bTD cc \eTD \bTD yy \eTD \eTR
\bTR \bTD bb \eTD                    \bTD dd \eTD              \eTR
\eTABLE

\unskip \egroup
```

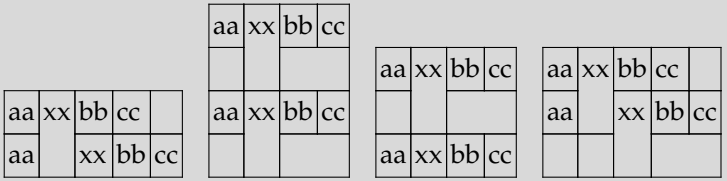
| | | | | |
|---|---|---|---|---|
| a | bb | ccc | dd | e |
| a | bb | ccc | dd | e |
| a | bb | ccc | dd | e |
| a | bb | ccc | dd | e |
| a | bb | ccc | dd | e |
| a | bb | ccc | dd | e |
| a | bb | ccc | dd | e |

```
\setupTABLE[column][odd][background=color,backgroundcolor=red]
\setupTABLE[row][odd][background=color,backgroundcolor=blue]
\setupTABLE[even][odd][background=color,backgroundcolor=red]

\bTABLE
\bTR \bTD a \eTD \bTD bb \eTD \bTD ccc \eTD \bTD dd \eTD \bTD e \eTD \eTR
\bTR \bTD a \eTD \bTD bb \eTD \bTD ccc \eTD \bTD dd \eTD \bTD e \eTD \eTR
\bTR \bTD a \eTD \bTD bb \eTD \bTD ccc \eTD \bTD dd \eTD \bTD e \eTD \eTR
\bTR \bTD a \eTD \bTD bb \eTD \bTD ccc \eTD \bTD dd \eTD \bTD e \eTD \eTR
\bTR \bTD a \eTD \bTD bb \eTD \bTD ccc \eTD \bTD dd \eTD \bTD e \eTD \eTR
\bTR \bTD a \eTD \bTD bb \eTD \bTD ccc \eTD \bTD dd \eTD \bTD e \eTD \eTR
\bTR \bTD a \eTD \bTD bb \eTD \bTD ccc \eTD \bTD dd \eTD \bTD e \eTD \eTR
\eTABLE
```

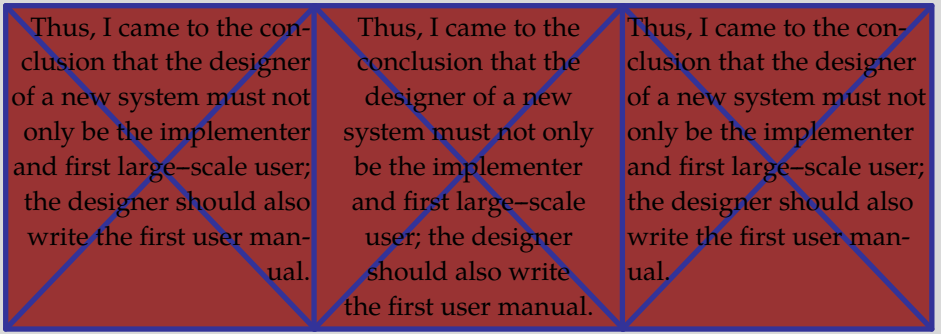
| | | | | |
|---|---|---|---|---|
| aa | bbb | cc | d | eeee |
| aa | bbb | cc | d | eeee |
| aa | bbb | cc | d | eeee |

| | | | | |
|---|---|---|---|---|
| aa | bbb | cc | d | eeee |
| aa | bbb | cc | d | eeee |
| aa | bbb | cc | d | eeee |

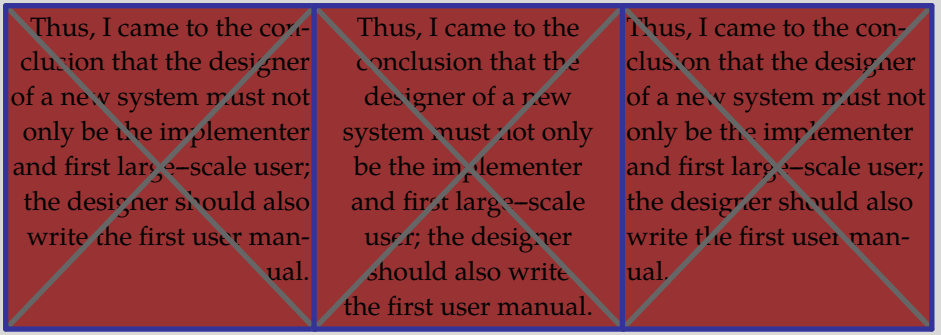
```
\hbox \bgroup \ignorespaces

\bTABLE
\setupTABLE[column][1][width=2cm]
\bTR \bTD aa \eTD \bTD bbb \eTD \bTD cc \eTD \bTD d \eTD \bTD eeee \eTD \eTR
\bTR \bTD aa \eTD \bTD bbb \eTD \bTD cc \eTD \bTD d \eTD \bTD eeee \eTD \eTR
\bTR \bTD aa \eTD \bTD bbb \eTD \bTD cc \eTD \bTD d \eTD \bTD eeee \eTD \eTR
\eTABLE

\unskip \quad \ignorespaces

\bTABLE
\setupTABLE[column][width=3em]
\bTR \bTD aa \eTD \bTD bbb \eTD \bTD cc \eTD \bTD d \eTD \bTD eeee \eTD \eTR
\bTR \bTD aa \eTD \bTD bbb \eTD \bTD cc \eTD \bTD d \eTD \bTD eeee \eTD \eTR
\bTR \bTD aa \eTD \bTD bbb \eTD \bTD cc \eTD \bTD d \eTD \bTD eeee \eTD \eTR
\eTABLE

\unskip \egroup
```




```
\hbox \bgroup \ignorespaces

\bTABLE
\bTR \bTD aa \eTD \bTD[nr=2] xx \eTD \bTD bb \eTD \bTD cc \eTD \eTR
\bTR \bTD aa \eTD \bTD[nr=2] xx \eTD \bTD bb \eTD \bTD cc \eTD \eTR
\eTABLE

\unskip \quad \ignorespaces

\bTABLE
\bTR \bTD aa \eTD \bTD[nr=2] xx \eTD \bTD bb \eTD \bTD cc \eTD \eTR \bTR \eTR
\bTR \bTD aa \eTD \bTD[nr=2] xx \eTD \bTD bb \eTD \bTD cc \eTD \eTR \bTR \eTR
\eTABLE

\unskip \quad \ignorespaces

\bTABLE
\bTR \bTD aa \eTD \bTD[nr=2] xx \eTD \bTD bb \eTD \bTD cc \eTD \eTR \bTR \eTR
\bTR \bTD aa \eTD \bTD[nr=2] xx \eTD \bTD bb \eTD \bTD cc \eTD \eTR
\eTABLE

\unskip \quad \ignorespaces

\bTABLE
\bTR \bTD aa \eTD \bTD[nr=2] xx \eTD \bTD bb \eTD \bTD cc \eTD \eTR
\bTR \bTD aa \eTD \bTD[nr=2] xx \eTD \bTD bb \eTD \bTD cc \eTD \eTR \bTR \eTR
\eTABLE

\unskip \egroup
```



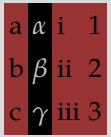

```
\startuniqueMPgraphic{crossed}
  path p ; p := unitsquare xscaled \overlaywidth yscaled \overlayheight ;
  fill p withcolor \MPcolor{red} ;
  drawoptions (withpen pencircle scaled 2pt withcolor \MPcolor{blue}) ;
  draw p ; draw llcorner p--urcorner p ; draw ulcorner p--lrcorner p ;
\stopuniqueMPgraphic

\defineoverlay[crossed][\uniqueMPgraphic{crossed}]

\bTABLE[width=.2\textwidth,background=crossed,frame=off]
\bTR \bTD[align=left]   \getbuffer[knuth-1] \eTD
     \bTD[align=middle] \getbuffer[knuth-1] \eTD
     \bTD[align=right]  \getbuffer[knuth-1] \eTD \eTR
\eTABLE
```




```
\startuniqueMPgraphic{fill}
  path p ; p := unitsquare xscaled \overlaywidth yscaled \overlayheight ;
  fill p withcolor \MPcolor{red} ;
\stopuniqueMPgraphic

\startuniqueMPgraphic{cross}
  path p ; p := unitsquare xscaled \overlaywidth yscaled \overlayheight ;
  drawoptions (withpen pencircle scaled 2pt withcolor \MPcolor{gray}) ;
  draw llcorner p--urcorner p ; draw ulcorner p--lrcorner p ;
  draw p withpen pencircle scaled 2pt withcolor \MPcolor{blue} ;
\stopuniqueMPgraphic

\defineoverlay[fill] [\uniqueMPgraphic{fill}]
\defineoverlay[cross][\uniqueMPgraphic{cross}]

\bTABLE[width=.2\textwidth,background={fill,foreground,cross},frame=off]
\bTR \bTD[align=left]   \getbuffer[knuth-1] \eTD
     \bTD[align=middle] \getbuffer[knuth-1] \eTD
     \bTD[align=right]  \getbuffer[knuth-1] \eTD \eTR
\eTABLE
```

| | | |
|---|---|---|
| first | alpha | one |
| second | beta | two |
| third | gamma | three |

```
\setupTABLE[row][odd] [background=color,backgroundcolor=red,frame=off]
\setupTABLE[row][even][background=color,backgroundcolor=gray,frame=off]

\bTABLE
\bTR \bTD first  \eTD \bTD alpha \eTD \bTD one   \eTD \eTR
\bTR \bTD second \eTD \bTD beta  \eTD \bTD two   \eTD \eTR
\bTR \bTD third  \eTD \bTD gamma \eTD \bTD three \eTD \eTR
\eTABLE
```




```
\setupTABLE[background=color,backgroundcolor=red,frame=off]
\setupTABLE[column][2][backgroundcolor=black,color=white]

\bTABLE
\bTR \bTD a \eTD \bTD $\alpha$ \eTD \bTD i   \eTD \bTD 1 \eTD \eTR
\bTR \bTD b \eTD \bTD $\beta $ \eTD \bTD ii  \eTD \bTD 2 \eTD \eTR
\bTR \bTD c \eTD \bTD $\gamma$ \eTD \bTD iii \eTD \bTD 3 \eTD \eTR
\eTABLE
```

| | | |
|---|---|---|
| Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual. | Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual. | first |
| The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important. | The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important. | second |

```
\bTABLE
\setupTABLE[column][1][width=175pt]
\bTR \bTD \getbuffer[knuth-1] \eTD
     \bTD \getbuffer[knuth-1] \eTD \bTD first  \eTD \eTR
\bTR \bTD \getbuffer[knuth-2] \eTD
     \bTD \getbuffer[knuth-2] \eTD \bTD second \eTD \eTR
\eTABLE
```

| | | |
|---|---|---|
| Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual. | Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual. | first |
| The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important. | The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important. | second |

```
\bTABLE
\bTR \bTD \getbuffer[knuth-1] \eTD
     \bTD \getbuffer[knuth-1] \eTD \bTD first  \eTD \eTR
\bTR \bTD \getbuffer[knuth-2] \eTD
     \bTD \getbuffer[knuth-2] \eTD \bTD second \eTD \eTR
\eTABLE
```

| | |
|---|---|
| Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual. | first quote |
| The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important. | second quote |
| But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robust, the real test begins as people with many different viewpoints undertake their own experiments. | third quote |

```
\bTABLE
\setupTABLE[background=color,backgroundcolor=red,color=gray,frame=off]
\setupTABLE[column][last][align={middle,lohi}]
\setupTABLE[1][2]  [backgroundcolor=gray,color=red]
\setupTABLE[2][1,3][backgroundcolor=gray,color=red]
\bTR \bTD \getbuffer[knuth-1] \eTD \bTD first quote  \eTD \eTR
\bTR \bTD \getbuffer[knuth-2] \eTD \bTD second quote \eTD \eTR
\bTR \bTD \getbuffer[knuth-3] \eTD \bTD third quote  \eTD \eTR
\eTABLE
```

| | |
|---|---|
| Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual. | first |
| The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important. | second |

```
\bTABLE
\bTR \bTD[width=80pt]  \getbuffer[knuth-1] \eTD \bTD first  \eTD \eTR
\bTR \bTD[width=200pt] \getbuffer[knuth-2] \eTD \bTD second \eTD \eTR
\eTABLE
```

| | |
|---|---|
| Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual. | first |
| The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important. | secc |
| But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robust, the real test begins as people with many different viewpoints undertake their own experiments. | thir |

```
\bTABLE
\bTR \bTD[width=80pt]  \getbuffer[knuth-1] \eTD \bTD first  \eTD \eTR
\bTR \bTD[width=200pt] \getbuffer[knuth-2] \eTD \bTD second \eTD \eTR
\bTR \bTD              \getbuffer[knuth-3] \eTD \bTD third  \eTD \eTR
\eTABLE
```

| | |
|---|---|
| Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual. | |
| The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important. | The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important. |
| But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robust, the real test begins as people with many different viewpoints undertake their own experiments. | Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual. |

```
\bTABLE
\bTR \bTD[nc=2] \getbuffer[knuth-1]                          \eTD \eTR
\bTR \bTD \getbuffer[knuth-2] \eTD \bTD \getbuffer[knuth-2] \eTD \eTR
\bTR \bTD \getbuffer[knuth-3] \eTD \bTD \getbuffer[knuth-1] \eTD \eTR
\eTABLE
```

Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the des

The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities why they were important.

But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robu

```
\bTABLE
\bTR \bTD[nc=5] \getbuffer[knuth-1]                                        \eTD \eTR
\bTR \bTD[nc=2] \getbuffer[knuth-2] \eTD \bTD[nc=3] \getbuffer[knuth-2] \eTD \eTR
\bTR \bTD[nc=3] \getbuffer[knuth-3] \eTD \bTD[nc=2] \getbuffer[knuth-1] \eTD \eTR
\eTABLE
```

| | |
|---|---|
| Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual. | |
| The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important. | The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important. |
| But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robust, the real test begins as people with many different viewpoints undertake their own experiments. | Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual. |

```
\bTABLE[width=.5\hsize]
\bTR \bTD[nc=2] \getbuffer[knuth-1]                          \eTD \eTR
\bTR \bTD \getbuffer[knuth-2] \eTD \bTD \getbuffer[knuth-2] \eTD \eTR
\bTR \bTD \getbuffer[knuth-3] \eTD \bTD \getbuffer[knuth-1] \eTD \eTR
\eTABLE
```

<table>
<tr><td colspan="2">Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual.</td><td rowspan="2">Thus, I came to the conclusion that the designer of a new system must not only be the implementer and first large–scale user; the designer should also write the first user manual.</td></tr>
<tr><td>The separation of any of these four components would have hurt TEX significantly. If I had not participated fully in all these activities, literally hundreds of improvements would never have been made, because I would never have thought of them or perceived why they were important.</td><td>first</td></tr>
<tr><td>But a system cannot be successful if it is too strongly influenced by a single person. Once the initial design is complete and fairly robust, the real test begins as people with many different viewpoints undertake their own experiments.</td><td>second</td><td></td></tr>
</table>

```
\bTABLE
\bTR \bTD[nc=2] \getbuffer[knuth-1] \eTD
     \bTD[nr=2] \getbuffer[knuth-1] \eTD \eTR
\bTR \bTD \getbuffer[knuth-2]       \eTD \bTD first  \eTD \eTR
\bTR \bTD \getbuffer[knuth-3]       \eTD \bTD second \eTD \eTR
\eTABLE
```

| first | second | third | fourth |
|---|---|---|---|
| 100.000,00 | 1,0 | 100.000,00 | 1,0 |
| 10.000,00 | 10,0 | 10.000,00 | 10,0 |
| 100,00 | 1,00 | 100,00 | 1,00 |
| 10 | 10,00 | 10 | 10,00 |

```
\setupTABLE                       [frame=off]
\setupTABLE[column][first]      [leftframe=on]
\setupTABLE[column][last]       [rightframe=on]
\setupTABLE[row]   [first]      [topframe=on]
\setupTABLE[row]   [first,last][bottomframe=on]

\setupTABLE[column][1][alignmentcharacter={.},aligncharacter=yes,align=middle]
\setupTABLE[column][2][alignmentcharacter={,},aligncharacter=yes,align=middle]

\bTABLE
\bTR\bTH first     \eTH\bTH second \eTH\bTH third     \eTH\bTH fourth\eTH\eTR
\bTR\bTD 100.000,00\eTD\bTD 1,0    \eTD\bTD 100.000,00\eTD\bTD 1,0   \eTD\eTR
\bTR\bTD 10.000,00 \eTD\bTD 10,0   \eTD\bTD 10.000,00 \eTD\bTD 10,0  \eTD\eTR
\bTR\bTD 100,00    \eTD\bTD 1,00   \eTD\bTD 100,00    \eTD\bTD 1,00  \eTD\eTR
\bTR\bTD 10        \eTD\bTD 10,00  \eTD\bTD 10        \eTD\bTD 10,00 \eTD\eTR
\eTABLE
```

| aa | bb | cc | dd |
|---|---|---|---|
| aa | bb | cc | dd |
| aa | bb | cc | dd |
| aa | bb | cc | dd |
| aa | bb | cc | dd |
| aa | bb | cc | dd |
| aa | bb | cc | dd |

```
\definecolor[back-1][r=.8,g=.8,b=.4]
\definecolor[back-2][r=.8,g=.8,b=.6]
\definecolor[back-3][r=.8,g=.8,b=.8]

\setupTABLE[background=color,frame=off,framecolor=white]
\setupTABLE[row][1]    [rulethickness=2pt,bottomframe=on]
\setupTABLE[row][1]    [backgroundcolor=back-1]
\setupTABLE[row][odd]  [backgroundcolor=back-2]
\setupTABLE[row][even] [backgroundcolor=back-3]

\bTABLE
\bTR \bTD aa \eTD \bTD bb \eTD \bTD cc \eTD \bTD dd \eTD \eTR
\bTR \bTD aa \eTD \bTD bb \eTD \bTD cc \eTD \bTD dd \eTD \eTR
\bTR \bTD aa \eTD \bTD bb \eTD \bTD cc \eTD \bTD dd \eTD \eTR
\bTR \bTD aa \eTD \bTD bb \eTD \bTD cc \eTD \bTD dd \eTD \eTR
\bTR \bTD aa \eTD \bTD bb \eTD \bTD cc \eTD \bTD dd \eTD \eTR
\bTR \bTD aa \eTD \bTD bb \eTD \bTD cc \eTD \bTD dd \eTD \eTR
\bTR \bTD aa \eTD \bTD bb \eTD \bTD cc \eTD \bTD dd \eTD \eTR
\eTABLE
```

| | | | | |
|---|---|---|---|---|
| 1/1 | 1/2 | 1/3 | 1/4 | 1/5 |
| 2/1 | 2/2 | 2/3 | 2/4 | 2/5 |
| 3/1 | 3/2 | 3/3 | 3/4 | 3/5 |
| 34/1 | | | | |
| 4/1 | 4/2 | 4/3 | 4/4 | 4/5 |

```
\setupTABLE[frame=off,width=3em]
\setupTABLE[c][each][align={middle,lohi}]
\setupTABLE[r][1,4][topframe=on]
\setupTABLE[r][3,4][bottomframe=on]
\setupTABLE[1,4][2][topframe=on,bottomframe=on]
\setupTABLE[2][2][topframe=on]
\setupTABLE[3][2][bottomframe=on]

\bTABLE
\bTR\bTD1/1\eTD               \bTD1/2\eTD\bTD1/3\eTD\bTD1/4\eTD\bTD1/5\eTD\eTR
\bTR\bTD2/1\eTD               \bTD2/2\eTD\bTD2/3\eTD\bTD2/4\eTD\bTD2/5\eTD\eTR
\bTR\bTD[nr=2]3/1 34/1 4/1\eTD\bTD3/2\eTD\bTD3/3\eTD\bTD3/4\eTD\bTD3/5\eTD\eTR
\bTR                          \bTD4/2\eTD\bTD4/3\eTD\bTD4/4\eTD\bTD4/5\eTD\eTR
\eTABLE
```

| | | |
|---|---|---|
| oeps | oeps | oeps |
| oeps | oeps | oeps |
| oeps | oeps | oeps |

```
\defineTABLEsetup [xx] [foregroundcolor=red]
\defineTABLEsetup [zz] [backgroundcolor=blue]
\bTABLE
    \bTR      \bTD      oeps \eTD  \bTD oeps \eTD \bTDs[zz] oeps \eTDs \eTR
    \bTR      \bTDs[xx] oeps \eTDs \bTD oeps \eTD \bTD      oeps \eTD  \eTR
    \bTRs[xx] \bTD      oeps \eTD  \bTD oeps \eTD \bTDs[zz] oeps \eTDs \eTRs
\eTABLE
```