

The **linegoal*** package

A new “dimen” corresponding to the remainder of the line

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Abstract

linegoal provides a macro `\linegoal` which expands to the dimension of the remainder of the line. It requires pdfTeX for its `\pdfsavepos` primitive. Two compilations (at least) are necessary to get the correct line goal.

More precisely: `\setlength` is overloaded so that:

```
\setlength\mydimen{\linegoal}
```

sets `\mydimen` to be the (horizontal) length of the remainder of the current line. This can be useful for use with `tabularx` or `tabular*` for example (see [User interface](#)).

linegoal requires pdfTeX and uses the `zref-savepos` module of `zref`¹ package.

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1 User interface

This is a tabular in the remainder of the line:

```
\begin{tabularx}{\linegoal{1|X|}}\hline
  Something & Something else \\
  Something & Something else \\ \hline
\end{tabularx}
```

This is a tabular in the remainder of the line:

Something	Something else
Something	Something else

This documentation is produced with the DocStrip utility.

- To get the documentation, run (thrice): `pdflatex linegoal.dtx`
- To get the index, run: `makeindex -s gind.ist linegoal.idx`
- To get the package, run: `etex linegoal.dtx`

The `.dtx` file is embedded into this pdf file thank to `embedfile` by H. Oberdiek.

1. zref: CTAN:macros/latex/contrib/oberdiek/

2 Implementation

2.1 Identification

- This package is intended to use with \LaTeX so we don't check if it is loaded twice.
- The package namespace is `\LNGL@`

```

1 <*package>
2 \NeedsTeXFormat{LaTeX2e}% LaTeX 2.09 can't be used (nor non-LaTeX)
3   [2005/12/01]% LaTeX must be 2005/12/01 or younger (see kvsetkeys.dtx).
4 \ProvidesPackage{linegoal}
5   [2010/05/07 v1.0 - A new dimen corresponding to the remainder of the line]
6 \def\LNGL@pkg@name{linegoal}

```

2.2 Requirements

The package requires `zref` and its module `zref-savepos`.

```

7 \ifdefined\pdfsavepos\else
8   \PackageWarning\LNGL@pkg@name
9     {This package requires pdfTeX for its \string\pdfsavepos primitive\MessageBreak
10    pdfTeX has not been detected and \LNGL@pkg@name\space will not be loaded}%
11   \expandafter\endinput
12 \fi
13 \RequirePackage{etex,zref,zref-savepos}

```

2.3 zref property : page as arabic number

```

14 \zref@newprop*{\LNGL@page}[0]{\the\c@page}

```

2.4 The `linegoal` macro

`\linegoal`

```

15 \globcount\LNGL@unique
16 \def\linegoal{linegoal}
17 \def\set@linegoal#1#2{%
18   \@bsphack
19   \if@filesw
20     \global\advance\LNGL@unique\@ne
21     \pdfsavepos
22     \zref@labelbyprops{linegoal.\the\LNGL@unique}{posx,LNGL@page}%
23     #1=\dimexpr\linewidth-\zposx{linegoal.\the\LNGL@unique}sp%
24     +\ifodd\zref@extractdefault{linegoal.\the\LNGL@unique}{LNGL@page}{0}
25       \oddsidemargin
26     \else \evensidemargin
27     \fi
28     +1in+\hoffset
29     \relax
30   \fi
31   \@esphack
32 }% \set@linegoal
33 \AtBeginDocument\LNGL@AtBeginDocument@hook
34 \def\LNGL@AtBeginDocument@hook{%
35   \let\LNGL@ORI@setlength\setlength
36   \protected\def\setlength##1##2{%
37     \ifx\linegoal##2 \expandafter\set@linegoal
38     \else \expandafter\LNGL@ORI@setlength
39     \fi{##1}{##2}%

```

```
40 }% \setlength
41 }% \LNGL@AtBeginDocument@hook

42 \</package>
```

3 History

[2010/05/07 v1.0]

- First version.

4 References

[1] Heiko Oberdiek: *The zref package*; 2010/05/01 v2.17; CTAN:macros/latex/contrib/oberdiek/.

5 Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in *roman* refer to the code lines where the entry is used.

Symbols		
<code>\@bsphack</code>	18	<code>\linewidth</code> 23
<code>\@esphack</code>	31	<code>\LNGL@AtBeginDocument@hook</code> 33, 34, 41
		<code>\LNGL@ORI@setlength</code> 35, 38
		<code>\LNGL@pkg@name</code> 6, 8, 10
<code>\c@page</code>	14	<code>\LNGL@unique</code> 15, 20, 22, 23, 24
		O
<code>\dimexpr</code>	23	<code>\oddsidemargin</code> 25
		P
<code>\evensidemargin</code>	26	<code>\PackageWarning</code> 8
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		<code>\zposx</code> 23
<code>\if@files</code>	19	<code>\zref@extractdefault</code> 24
<code>\ifodd</code>	24	<code>\zref@labelbyprops</code> 22
		<code>\zref@newprop</code> 14
<code>\linegoal</code>	<u>15</u>	