The fnumprint package*

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Abstract

The fnumprint package provides a macros to decide to typeset a numbers either as number or as word name (only in German yet).

Fork me on GitHub: https://github.com/ypid/latex-packages

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1 Introduction

The fnumprint package defineds two macros to decide to typeset a numbers either as number or as word name for the number. If the number is between zero and twelve (including zero and twelve) then the word name will be used. In any other cases the number will be typesetted with the numprint package. This package uses the zahl2string package to convert a number in the word name in German. So the conversion of a number (0–12) to a english word number is also implemented by fnumprint (not finish).

^{*}This document corresponds to fnumprint v1.0, dated 2012/08/19.

2 Usage

Just load the package placing

```
\usepackage{\jobname}
```

in the preamble of your LATEX 2ε source file.

\fnumprintc

The macro \fnumprintc $\{\langle \cancel{L}^{\dagger}T_{\cancel{E}}X \ counter \ name \rangle\}$ takes a name of a LaTeX counter as its only not optional parameter and typesets it.

\fnumprint

The macro $\{number\}$ is like the $\{numbrintc \text{ marco but it takes a number or a marco that expands to a number. A <math>T_EX$ counter can also used with this marco.

3 Examples

marco	expanded marco
\fnumprint{-1}	-1
\fnumprint{0}	zero
\fnumprint{10}	ten
\fnumprint{12}	twelve
\fnumprint{13}	13
\fnumprint{\the\year}	2012
\fnumprintc{page}	two

4 Implementation

The following definitions are based on these packages

```
1 \RequirePackage{xifthen}
2 \RequirePackage{zahl2string,numprint}
3
4
5 \renewcommand{\ns@neunzehn}[1]{%
6 \ifcase#1\@empty\or one\or two\or three\or four\or five\or six\or%
7 seven\or eight\or nine\or ten\or eleven\or twelve\or thirteen\or%
8 fourteen\or fifteen\or sixteen\or seventeen\or%
9 eighteen\or nineteen\fi%
10 }
11 \renewcommand{\ns@neunzehns}[1]{%
12 \ifcase#1\@empty\else\ns@neunzehn{#1}\fi%
13 }
14 \renewcommand{\@numstring}[1]{%
15 \ns@numstr{#1}\ns@neunzehns{zero}{}%
16 }
17 \let\numstr\@numstring%
```

4.1 Marco definition

\fnumprint

Here is the \fundamental fnumprint marco defined. It takes one not optional parameter. The parameter must be a number or a marco which expands to a number.

```
19 \DeclareRobustCommand{\fnumprint}[1]{%
    \left\{ 13\right\} 
21
       \left\{ 1 < 0 \right\}
         \numprint{#1}%
22
      }{%
23
^{24}
        \numstr{#1}%
      }%
25
26
    }{%
27
      \numprint{#1}%
28
    }%
29 }
```

\fnumprintc

Here is the \fnumprintc marco defined. It takes one not optional parameter. The parameter must be the name of a counter.

```
30 \DeclareRobustCommand{\fnumprintc}[1]{%
    \left\{ \right\} < 13 
31
      \left\{ \right\} < 0 \
32
        \cntprint{#1}%
33
      }{%
34
        \numstring{#1}%
35
36
    }{%
37
      \cntprint{#1}%
38
   }%
39
40 }
41 \endinput
```

Change History

```
v1.0 General: Initial version \dots 1
```

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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.

${f F}$	\ns@neunzehns $6, 14$	${f V}$
	\ns@numstr 5, 6	\value 30, 31
\fnumprintc 2, <u>29</u>	\numprint 21, 26	
${f N}$	\numstr 23	
\ns@neunzehn $5, 8, 15$	\numstring 34	