The ftnxtra package

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This package fixes the isuue of footnote inside `\caption{}`, `tabular` environment and `\section{}` like (`\chapter{}`, `\part{}`, `\subsection{}` and etc) commands.

File I

ftnxtra implementation

```
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{ftnxtra}%
[2009/10/18 footnote fixes for standard LaTeX]
\newtoks\ftnxtra@p@ftn
\let\FN@sf@@footnote\footnote
\def\footnote{\ifx\protect\@typeset@protect
    \expandafter\FN@sf@@footnote
  \else
    \expandafter\FN@sf@gobble@opt
  \fi
}
\edef\FN@sf@gobble@opt{\noexpand\protect
  \expandafter\noexpand\csname FN@sf@gobble@opt \endcsname}
\expandafter\def\csname FN@sf@gobble@opt \endcsname{%
  \@ifnextchar[%]
    \FN@sf@gobble@twobracket
    \@gobble
}
\def\FN@sf@gobble@twobracket[#1]#2{}
\let\FN@sf@@footnotemark\footnotemark
\def\footnotemark{\ifx\protect\@typeset@protect
    \expandafter\FN@sf@@footnotemark
  \else
    \expandafter\FN@sf@gobble@optonly
  \fi
}
\edef\FN@sf@gobble@optonly{\noexpand\protect
  \expandafter\noexpand\csname FN@sf@gobble@optonly \endcsname}
\expandafter\def\csname FN@sf@gobble@optonly \endcsname{%
```

```
  \@ifnextchar[%]
    \FN@sf@gobble@bracket
    {}%
}
\def\FN@sf@gobble@bracket[#1]{}
\def\@tabular{%
   \leavevmode \hbox \bgroup
   \let\@footnotetext\ftnxtra@p@ftntext
   $\let\@acol\@tabacol
   \let\@classz\@tabclassz
   \let\@classiv\@tabclassiv \let\\\@tabularcr\@tabarray}
\def\endtabular{\crcr\egroup
                \egroup $\egroup
                \the\ftnxtra@p@ftn
                \global\ftnxtra@p@ftn{}%
                }
\long\def\ftnxtra@p@ftntext#1{%
  \edef\@tempy{\the\ftnxtra@p@ftn\noexpand\footnotetext[\the\c@footnote]}%
  \global\ftnxtra@p@ftn\expandafter{\@tempy{#1}}}%
\def\@xfloat #1[#2]{%
  \@nodocument
  \def \@captype {#1}%
   \def \@fps {#2}%
   \@onelevel@sanitize \@fps
   \def \reserved@b {!}%
   \ifx \reserved@b \@fps
     \@fpsadddefault
   \else
     \ifx \@fps \@empty
       \@fpsadddefault
     \fi
   \fi
   \ifhmode
     \@bsphack
     \@floatpenalty -\@Mii
   \else
     \@floatpenalty-\@Miii
   \fi
  \ifinner
     \@parmoderr\@floatpenalty\z@
  \else
    \@next\@currbox\@freelist
      {%
       \@tempcnta \sixt@@n
       \expandafter \@tfor \expandafter \reserved@a
         \expandafter :\expandafter =\@fps
         \do
          {%
           \if \reserved@a h%
             \ifodd \@tempcnta
```

```
            \else
              \advance \@tempcnta \@ne
            \fi
          \fi
          \if \reserved@a t%
            \@setfpsbit \tw@
          \fi
          \if \reserved@a b%
            \@setfpsbit 4%
          \fi
          \if \reserved@a p%
            \@setfpsbit 8%
          \fi
          \if \reserved@a !%
            \ifnum \@tempcnta>15
              \advance\@tempcnta -\sixt@@n\relax
            \fi
          \fi
          }%
      \@tempcntb \csname ftype@\@captype \endcsname
      \multiply \@tempcntb \@xxxii
      \advance \@tempcnta \@tempcntb
      \global \count\@currbox \@tempcnta
      }%
    \@fltovf
  \fi
  \global \setbox\@currbox
    \color@vbox
      \normalcolor
      \vbox \bgroup
       \let\@footnotetext\ftnxtra@p@ftntext
        \hsize\columnwidth
        \@parboxrestore
        \@floatboxreset
}
\def \@endfloatbox{%
      \par\vskip\z@skip      %% \par\vskip\z@ added 15 Dec 87
      \@minipagefalse
      \outer@nobreak
    \egroup                  %% end of vbox
    \the\ftnxtra@p@ftn
    \global\ftnxtra@p@ftn{}%
  \color@endbox
}
```

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

\@Mii 64
\@Miii 66
\@acol 38
\@bsphack 63
\@captype 51, 99
\@classiv 40
\@classz 39
\@currbox . 71, 102, 106
\@empty 58
\@endfloatbox 115
\@floatboxreset . . . 113
\@floatpenalty 64, 66, 69
\@fltovf 104
\@footnotetext . 37, 110
\@fps . . 52, 53, 55, 58, 75
\@fpsadddefault . 56, 59
\@freelist 71
\@gobble 17
\@ifnextchar 15, 30
\@minipagefalse . . . 117
\@ne 81
\@next 71
\@nodocument 50
\@onelevel@sanitize 53
\@parboxrestore . . . 112
\@parmoderr 69
\@setfpsbit . . 85, 88, 91
\@tabacol 38
\@tabarray 40
\@tabclassiv 40
\@tabclassz 39
\@tabular 35
\@tabularcr 40
\@tempcnta . . 73, 79, 81, 94, 95, 101, 102
\@tempcntb 99–101
\@tempy 47, 48
\@tfor 74
\@typeset@protect 6, 21
\@xfloat 49
\@xxxii 100
\\ 40

A

\advance . . . 81, 95, 101

B

\bgroup 36, 109

C

\c@footnote 47
\color@endbox 122
\color@vbox 107
\columnwidth 111
\count 102
\crcr 41
\csname 13, 14, 28, 29, 99

D

\def 6, 14, 19, 21, 29, 34, 35, 41, 46, 49, 51, 52, 54, 115
\do 76

E

\edef 12, 27, 47
\egroup 41, 42, 119
\else 8, 23, 57, 65, 70, 80
\endcsname 13, 14, 28, 29, 99
\endtabular 41
\expandafter 7, 9, 13, 14, 22, 24, 28, 29, 48, 74, 75

F

\fi . . 10, 25, 60, 61, 67, 82, 83, 86, 89, 92, 96, 97, 105
\FN@sf@@footnote . 5, 7
\FN@sf@@footnotemark 20, 22
\FN@sf@gobble@bracket 31, 34
\FN@sf@gobble@opt 9, 12
\FN@sf@gobble@optonly 24, 27
\FN@sf@gobble@twobracket 16, 19
\footnote 5, 6
\footnotemark . . . 20, 21
\footnotetext 47
\ftnxtra@p@ftn 4, 43, 44, 47, 48, 120, 121
\ftnxtra@p@ftntext 37, 46, 110

G

\global 44, 48, 102, 106, 121

H

\hbox 36
\hsize 111

I

\if . . . 78, 84, 87, 90, 93
\ifhmode 62
\ifinner 68
\ifnum 94
\ifodd 79
\ifx 6, 21, 55, 58

L

\leavevmode 36
\let . . . 5, 20, 37–40, 110
\long 46

M

\multiply 100

N

\NeedsTeXFormat 1
\newtoks 4
\noexpand 12, 13, 27, 28, 47
\normalcolor 108

O

\outer@nobreak 118

P

\par 116
\protect . . 6, 12, 21, 27
\ProvidesPackage . . . 2

R

\relax 95
\reserved@a 74, 78, 84, 87, 90, 93
\reserved@b 54, 55

S

\setbox 106
\sixt@@n 73, 95

T

\the 43, 47, 120
\tw@ 85

V

\vbox 109
\vskip 116

Z

\z@ 69, 116
\z@skip 116