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ifmtarg.sty

The ifmtarg package

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1 Documentation

The ifmtarg package provides an if-then-else programmer's command `\ifmtarg` for testing for an empty macro argument. 'Empty' here refers to an argument of zero or more spaces only.¹ The command is fully expandable; its syntax is:

```
argCode for arg empty
      Code for arg not empty
```

A variation is provided, `\ifnotmtarg`, to be used when only the 'false' branch is required. It is slightly more efficient when code is only required for a non-empty argument.

```
argCode for arg not empty
```

2 Examples

```
\newcommand{\isempty}[1]{%
  \@ifmtarg{#1}{YES}{NO}}
```

```
\isempty{}      → YES
\isempty{ }     → YES
\isempty{E}     → NO
\isempty{ E }   → NO
```

```
\newcommand{\isnotempty}[1]{%
  \@ifnotmtarg{#1}{YES}}
```

```
\isnotempty{}   →
\isnotempty{ }  →
\isnotempty{E}  → YES
\isnotempty{ E } → YES
```

3 History

(Peter's comments follow.) In an Email to me on 13 March 2000, Donald Arseneau pointed out some failings with my original definition of the `\ifmtarg` command:

```
\newcommand{\ifmtarg}[3]{%
  \edef\@mtarg{\zap@space#1 \@empty}%
  \ifx\@empty\@mtarg\relax #2\else #3\fi}
```

It works most of the time correctly but Donald showed that it can give unexpected results under conditions that I had not thought of. He suggested the coding that now appears in the package above for the `\ifmtarg` and `\ifnotmtarg` commands. For a discussion on detecting empty arguments see CTAN/info/aro-bend/answer.002

Change History

v1.2a New maintainer (Will Robertson)

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¹If you need a command to test for emptiness that doesn't include spaces, use the `\ifempty` : <http://www.latex-project.org/lppl.txt>
²<http://www.latex-project.org/lppl.txt>

4 *Implementation*

ifmtarg.sty