The ifmtarg package

Author: Donald Arseneau and Peter Wilson, Herries Press
Maintainer: LaTeX Project
https://github.com/LaTeX-Package-Repositories/herries-press

v1.2c 2026/10/09

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:

`\@ifmtarg{`⟨*arg*⟩`}{`⟨*Code 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.

`\@ifnotmtarg{`⟨*arg*⟩`}{`⟨*Code for 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
```

[1] If you need a command to test for emptiness that doesn't include spaces, use the `\tl_if_empty:nTF` conditional from the expl3 package. `\@ifmtarg` is equivalent to expl3's `\tl_if_blank:nTF`.

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/challenges/aro-bend/answer.002.

Change History

v1.2a New maintainer (Will Robertson)

v1.2b Typo in documentation example code

v1.2c Tag documentation; new maintainer (LaTeX team)

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[2] https://www.latex-project.org/lppl.txt

4 Implementation

```
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{ifmtarg}[2026/10/09 v1.2c check for an empty argument]
\begingroup
\catcode`\Q=3
\long\gdef\@ifmtarg#1{\@xifmtarg#1QQ\@secondoftwo\@firstoftwo\@nil}
\long\gdef\@xifmtarg#1#2Q#3#4#5\@nil{#4}
\long\gdef\@ifnotmtarg#1{\@xifmtarg#1QQ\@firstofone\@gobble\@nil}
\endgroup
\endinput
```