

The `upref` package

American Mathematical Society

Michael Downes

updated by Barbara Beeton

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1 Introduction

This package changes the `\ref` command so that it never applies a slanted font shape to its argument, regardless of context. This was the default behavior in `amsart` version 1.1. Starting with `amsart` version 1.2, upright references must be obtained via `\usepackage{upref}`.

2 Implementation

Give package name, date, version.

```
\NeedsTeXFormat{LaTeX2e}[1995/06/01]
\ProvidesPackage{upref}[2007/03/14 v2.04]
```

`\@noref` Give a warning if a cited reference isn't defined.

```
\newcommand{\@noref}[1]{%
  \@refundefinedtrue
  \nfss@text{\reset@font\bfseries ??}%
  \@latex@warning{Reference '#1' on page \thepage\space undefined}%
}
```

`\@setref` If the current fontshape is italic or slanted, we want to switch to upright/roman for printing the number of a `\ref`. This requires changing the `\@setref` command.

Since `\@setref` is modified by the `hyperref` package, delay the definition until `\AtBeginDocument`. Then check whether `hyperref` is loaded. If it is, we have to redefine some control sequences that `hyperref` defined in order to get upright references even in a `hyperref` environment. [tjk,bnb, 2004/07/29]

Get around a restriction in an internal AMS package (`shaderef`) by equating its command `\printref` to `\textup`; this applies consistently regardless of other circumstances that have unwanted effects. [dmj,bnb, 2005/05/17]

```
\AtBeginDocument{%
  \providecommand\printref{\textup}%
  \@ifpackageloaded{hyperref}{%
```

We overload `\Hy@setref@link` as this is where the upright references get clobbered. Used in overloaded `\@setref`. `\sw@slant` is usually applied by `\textup`, but the specials inserted by the hyperlink get in the way of testing for whether an italic correction is necessary; restore the test. [dmj,bnb, 2005/09/22]

If the link happens to be at the beginning of a paragraph, `\sw@slant` will produce an error, since neither nor a check for italic correction is valid in vertical mode. For reasons not apparent, this may also occur in some other situations, e.g., following a proof heading containing a cross reference (jams561el). Add `\leavevmode` to compensate. [dmj,bnb, 2007/02/14]

```
\def\Hy@setref@link#1#2#3#4#5#6\@nil#7{%
  \begingroup
  \leavevmode
  \sw@slant
  \toks0{\hyper@@link{#5}{#4}}%
  \toks1\@xp{#7{\printref{#1}\hbox{}}{#2}{#3}{#4}{#5}}%
  \edef\x{\endgroup\the\toks0\the\toks1}\x
}%
```

We should not have to overload `\@setref`, but there is a chance that an author is using an old version of hyperref which does not use `\Hy@setref@link` in `\@setref`.

```
\def\@setref#1#2#3{%
  \ifx#1\relax
    \@xp\protect\@noref{#3}%
  \else
    \@xp\Hy@setref@link#1\@empty\@empty\@nil{#2}%
  \fi
}%
}%
\def\@setref#1#2#3{\ifx#1\relax
  \protect\@noref{#3}%
\else
  \protect\printref{\@xp#2#1\hbox{}}%
\fi
}%
}%
}
```

`\@upn` The function `\@upn` is used to force theorem numbers and similar elements to be upright in sloped or italic contexts. If a suitable italic font with upright numbers and punctuation is available, this function should be redefined to be a no-op.

```
\providecommand\@upn{\textup}
```

The usual `\endinput` to ensure that random garbage at the end of the file doesn't get copied by `docstrip`.

```
\endinput
```