The HEP-ACRONYM package*

Acronyms based on glossaries-extra with sentence-aware capitalisation and first-use links

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Abstract

The HEP-ACRONYM package provides sentence-aware acronym helpers based on GLOSSARIES-EXTRA. It defines declaration commands for regular, always-short, always-long, and alternative long-form acronyms, optional links back to the first use, reset and dummy-use helpers, and support for several acronym groups.

Acronyms are implemented using the GLOSSARIES-EXTRA package [1] which is an extension of the GLOSSARIES package [2] and must be loaded after the HYPERREF package [3]. It can be loaded using `\usepackage{hep-acronym}`.

`hyper` The `hyper` option controls whether later acronym uses link back to their first appearance. It is enabled by default and can be deactivated with `hyper=false`.

`titlesec` The TITLESEC package [4] is loaded so that acronyms at the beginning of section titles are capitalised. Classes with their own sectioning code, such as AMSART and PoS, are incompatible with TITLESEC; `titlesec=false` does not load it. This is the default for the KOMA-Script classes. Acronyms at the beginning of numbered section titles are then still capitalised. The HEP-PAPER package sets this option in its `amsart` and `pos` compatibility modes.

`\acronym` The `\acronym`⟨*⟩`[`⟨*typeset abbreviation*⟩`]{`⟨*abbreviation*⟩`}`⟨*⟩`{`⟨*definition*⟩`}[`⟨*plural definition*⟩`]` macro generates the singular `\`⟨*abbreviation*⟩ and plural `\`⟨*abbreviation*⟩`s` macros.

The first star prevents the addition of an 's' to the abbreviation plural. The second star restores the TEX default of swallowing subsequent white space. The long form is only shown at the first appearance of these macros, later appearances generate the abbreviation with a hyperlink to the long form. Capitalisation at the beginning of paragraphs and sentences is (mostly) ensured. The long form is never used in math mode which can be exploited to enforce the short form. In order to enforce the long form use `\`⟨*abbreviation*⟩`long`. As there can be no fixed rule whether to use the long form or the short form in section headers the user is left to their own devices e.g.

`\sentence` `\glsdesc{`⟨*abbreviation*⟩`}`, `\Glsdesc{`⟨*abbreviation*⟩`}`. The `\sentence` macro ensures that the directly following abbreviation is capitalised.

In portable document format (PDF) strings, such as bookmarks and the document information, the acronym macros expand to their short form, or to their long form for the `long` variants. An acronym macro at the beginning of a PDF string or directly after `\sentence` is capitalised. Optional arguments of the acronym macros are not supported in PDF strings, and `\textsc` in a typeset abbreviation becomes upper case. In the table of contents and the lists of figures and tables, acronyms are shown in their short form without links, and they change neither the first

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use nor the entry count. Acronyms in the text of links, e.g. of `\href` or `\hyperlink`, do not link to their first use either.

`\shortacronym` `\longacronym` The `\shortacronym` and `\longacronym` macros are drop-in replacements of the `\acronym` macro showing only the short or long form of their acronym.

`\acronymalternative` The `\acronymalternative{`⟨*acronym*⟩`}{`⟨*name*⟩`}`⟨***⟩`{`⟨*alternative long form*⟩`}` macro defines an additional acronym macro that shares the use counter and short form of ⟨*acronym*⟩ but prints the supplied long form at first use.

`\resetacronym` The first use form of the acronym can be enforced by resetting the acronym counter with `\resetacronym{`⟨*key*⟩`}`.

`\dummyacronym` If the acronym counter equals one at the end of the document the short form of the acronym is not introduced. Placing a `\dummyacronym{`⟨*key*⟩`}` at the end of the document ensures that the short form is introduced.

`\acronyms` The `\acronyms[`⟨*key*⟩`]{`⟨*title*⟩`}` macro creates a new acronym glossary and switches subsequent declarations to it. Without the optional argument the mandatory argument is used both as glossary key and printed title.

`warning` In order to reduce the number of potentially conflicting packages the GLOSSARIES package is loaded without any glossary style. In the case that the glossary should be printed additional packages must be loaded via e.g. `\usepackage{glossary-list}`.

References

[1] N. T. Dickimaw Books. 'The `glossaries-extra` package: An extension to the `glossaries` package' (2015). CTAN: `glossaries-extra`.

[2] N. Talbot. 'The `glossaries` package: Create glossaries and lists of acronyms' (2007). CTAN: `glossaries`.

[3] *LaTeX3 Project*. 'Hypertext marks in LaTeX: a manual for `hyperref`: Extensive support for hypertext in LaTeX' (1995). CTAN: `hyperref`. GitHub: `latex3/hyperref`.

[4] J. Bezos. 'The `titlesec`, `titleps` and `titletoc` packages: Select alternative section titles' (1998). CTAN: `titlesec`. GitHub: `jbezos/titlesec`.