ACRO

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Typeset Acronyms

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English documentation

ACRO not only allows you to create acronyms in a simple way but also lets you add them to different classes of acronyms. Lists can be created of seperate classes wherever you want the list to appear.
ACRO also provides an option `single` which ignores acronyms that are used only once in the whole document.

Contents

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[1] CTAN: hyperref

1

1. Licence and Requirements

ACRO is placed under the terms of the LaTeX Project Public License, version 1.3 or later (`http://www.latex-project.org/lppl.txt`). It has the status "maintained."

ACRO loads and needs the following packages: expl3,[2] xparse,[3] xtemplate[4] and l3keys2e.[5]

2. About

> Acronyms and initialisms are abbreviations formed from the initial components in a phrase or a word. These components may be individual letters (as in CEO) or parts of words (as in Benelux and Ameslan). There is no universal agreement on the precise definition of the various terms nor on written usage.   *[Wik]*

After WIKIPEDIA told us what acronyms are – why do we need another package for them? There are several already: acronym,[6] acromake,[7] acroterm,[8] the abbreviations package abbrevs[9] (which has a bug,[10] though), and of course the mighty glossaries.[11] So there is *really* no reason for a new package.

The main reason for the existance of ACRO is a question on {TeX}.SE,[12] which intrigued me and in consequence led to ACRO and it's option `single`.

ACRO has very much similarities with the acronym package. In fact, quite some macros have the same name and meaning.[13]

3. Basics

3.1. Creating New Acronyms

Acronyms are created with the command `\NewAcronym` that can only be used in the preamble.

▶ `\NewAcronym*{<id>}{<short>,<pl>}[<alt.>]{<long>,<pl>}{<extra>}[<class>]` % can be used only in preamble

▶ `\AcronymFormat{<id>}{<format>}` % can be used only in preamble

Although this command has quite a number of arguments. In the simplest case you'll only need three:

```
1  % preamble
2  \NewAcronym{test}{ST}{Some Test}
```

This creates the acronym ST with the ID `test` and the long form "Some Test". The other arguments will be described later in this document.

If you want to assign a special format to an acronym you can do that with `\AcronymFormat`.

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[2] CTAN: expl3   [3] CTAN: xparse   [4] CTAN: xtemplate   [5] CTAN: l3keys2e   [6] CTAN: acronym   [7] CTAN: acromake   [8] CTAN: acroterm   [9] CTAN: abbrevs   [10] `http://tex.stackexchange.com/q/59840/5049`   [11] CTAN: glossaries   [12] `http://tex.stackexchange.com/q/59449/5049`   [13] *Not* in the sense of `\meaning`!

```
1  % preamble:
2  \NewAcronym{ot}{ot}{Other Test}
3  \AcronymFormat{ot}{\scshape}
```

This now looks like this: OT.

3.2. Using the Acronyms – the Commands

Acronyms are used with with one of the following commands:

▶ \ac → basic command; the first output is different from subsequent ones.

▶ \acs → short form; the actual acronym.

▶ \acl → long form; the meaning of the acronym.

▶ \aca → alternative short form as specified in the [<short>] argument of \NewAcronym; if it hasn't been specified this is identical to \acs.

▶ \acf → first form; output like the first time \ac is output.

▶ \acp → plural form of \ac;

▶ \acsp → plural form of \acs;

▶ \aclp → plural form of \acp;

▶ \acap → plural form of \aca;

▶ \acfp → plural form of \acf;

If an acronym is used the first time with \ac its output is different from subsequent uses. To be clear on this: the first time! If the acronym has been used with *any* of the output commands before it is *not* the first time any more.

```
1  % preamble: \NewAcronym{cd}{cd}{Compact Disc}
2  % \AcronymFormat{cd}{\scshape}
3  first time: \ac{cd} \\
4  second time: \ac{cd} \\
5  short: \acs{cd} \\
6  alternative: \aca{cd} \\
7  long: \acl{cd} \\
8  short plural: \acsp{cd} \\
9  long plural: \aclp{cd}
```

first time: Compact Disc (CD)
second time: CD
short: CD
alternative: CD
long: Compact Disc
short plural: CDs
long plural: Compact Discs

3.3. Plural Forms

If an acronym is defined in the standard way ACRO uses an 's' that's appended to both the short and the long form when one of the plural commands is used. However, that is not always the best solution. For one thing not all acronyms may have a plural form. Second, the plural form especially of the long forms may be fomed differently. And third, other languages can have other plural endings.

For this reason \NewAcronym provides additional arguments:

▸ \NewAcronym{<id>}{<short>,<plural ending>}{<long>,<plural ending>}

▸ \NewAcronym*{<id>}{<short>,<plural ending>}{<long>,<plural form>}

These arguments are optional. If they're not used, the default setting is 's'. If you use the starred version long form will be replaced by the specifies plural form when necessary. A given short plural will still be appended.

```
1   % preamble:
2   % \NewAcronym{cd}{\textsc{cd}}{Compact Disc}
3   %    \AcronymFormat{cd}{\scshape}
4   % \NewAcronym{ny}{NY,}{New York,}
5   % \NewAcronym{sw}{SW}{Sammelwerk,e}
6   % \NewAcronym*{mp}{MP}{Member of Parliament,Members of Parliament}
7   \acsp{cd}, \aclp{cd} \\
8   \acsp{ny}, \aclp{ny} \\
9   \acsp{sw}, \aclp{sw} \\
10  \acsp{mp}, \aclp{mp}
```

CDs, Compact Discs
NY, New York
SWs, Sammelwerke
MPs, Members of Parliament

3.4. Alternative Short Forms

For some acronyms it might be useful to have alternative forms, maybe because they're written differently at the beginning of a sentence. For this \NewAcronym has an optional argument:

▸ \NewAcronym{<id>}{<short>}[<alternative>]{<long>}

```
1   % preamble \NewAcronym{jpg}{JPG}[JPEG]{Joint Photographic Experts
      Group}
2   default: \acs{jpg} \\
3   alt.: \aca{jpg}

    default: JPG
    alt.: JPEG
```

The alternative form uses the same plural ending as the default short form and is formatted in the same way.

3.5. Extra Information for the List Entry

Of course you can print a list of acronyms where there meaning is explained. Sometimes it can useful to add additional information there. This is done with another optional argument to \NewAcronym:

▸ \NewAcronym{<id>}{<short>}{<long>}{<extra>}

These information will only be displayed in the list. See section 5 for the impact of the following example.

```
1   % preamble:
2   % \NewAcronym{nato}{nato}{North Atlantic Treaty Organization}{\textit{
      deutsch}: Organisation des Nordatlantikvertrags}
3   % \AcronymFormat{nato}{\scshape}
4   The \ac{nato} is an intergovernmental military alliance based on the
5   North Atlantic Treaty which was signed on 4~April 1949. \ac{nato}
6   headquarters are in Brussels, Belgium, one of the 28 member states
7   across North America and Europe, the newest of which, Albania and
8   Croatia, joined in April 2009.

    The North Atlantic Treaty Organization (NATO) is an intergovernmental military alliance
    based on the North Atlantic Treaty which was signed on 4 April 1949. NATO headquarters
    are in Brussels, Belgium, one of the 28 member states across North America and Europe, the
    newest of which, Albania and Croatia, joined in April 2009.
```

4. Additional Commands

4.1. Using Classes

The acronyms of ACRO can be divided into different classes. This doesn't change the output but allows different acronym lists, see section 5. For this \NewAcronym has an optional argument:

▸ \NewAcronym{<id>}{<short>}{<long>}[<class>]

```
1  % preamble:
2  % \NewAcronym{la}{LA,}{Los Angeles,}[city]
3  % \NewAcronym{ny}{NY,}{New York,}[city]
4  \acl{la} (\acs{la}) \\
5  \acl{ny} (\acs{ny})

   Los Angeles (LA)
   New York (NY)
```

This might be useful if you can divide your acronyms into different types, technical and grammatical ones, say.

4.2. Resetting

If you want for some reason to fool ACRO into thinking that an acronym is used for the first time you can call this command:

▶ \acreset

```
1  \acreset                                       New York (NY)
2  \ac{ny}
```

Beware that this command acts *globally* and effects *all* acronyms!

5. Printing the List

Printing the whole list of acronyms is easy: just place \printacronyms wherever you want the list to be.

▶ \printacronyms{<list of classes>} → the *optional* argument takes a comma-separated list of the classes of acronyms that should in the list. If the argument is left out, *all* acronyms are printed.

```
1  \acsetup{hyperref=false,extra-style=comma}
2  \printacronyms
3  \acsetup{list-name=City Acronyms}
4  \printacronyms{city}
```

Acronyms

CD Compact Disc

JPG Joint Photographic Experts Group

LA Los Angeles

MP Member of Parliament

NATO North Atlantic Treaty Organization, *deutsch*: Organisation des Nordatlantikvertrags

NY New York

SW Sammelwerk

ST Some Test

City Acronyms

LA Los Angeles

NY New York

You can see that the default layout is a `description` list with a `section*` title. Both can be changed, see section 6.

6. Customization

6.1. General Options

There are a few options which change the general behaviour of ACRO.

▸ `single` = `true`/`false` → if set to true an acronym that's used only once in a document will only print the long form and will not be printed in the list.

▸ `hyperref` = `true`/`false` → if set to true the short forms of the acronyms will be linked to their list entry.

▸ `only-used` = `true`/`false` → this option is true as default. It means that only acronyms that are actually used in the document are printed in the list. If false, all acronyms defined with `\NewAcronym` will be written in the list.

All options of this and the following sections can be set up either as package options or via the setup command:

▸ `\acsetup{<options>}`

6.2. Options Regarding Acronyms

The options described in this section all influence the layout of one of the possible output forms of the acronyms.

▸ `short-format` = <format> → sets a format for all short forms. For example `short-format` = `\scshape` would print all short forms in small caps.

▸ `long-format` = <format> → the same for the long forms.

▸ `extra-format` = <format> → the same for the extra information.

▸ `first-style` = `default/footnote/square` → the basic style of the first appearance of an acronym.

▸ `extra-style` = `plain/comma/paren/bracket` → define the way the extra information is printed in the list.

```
1  % (Keep in mind that we're in
2  % a minipage here!)
3  \acsetup{first-style=footnote}
4  \acf{ny}
```

NY[a]
_____
[a] New York

6.3. Options Regarding the List

▸ `page-ref` = `none/plain/comma/paren` → The style with which the page number of the first appearance of the acronym in the text is displayed. Default: `none`

▸ `page-name` = <page name> → The "name" of the page label. Default: `p.`

▸ `list-type` = `table/<list>` → This option let's you choose how the list is printed. <list> can be any valid list like `itemize` or `description`. Default: `description`.

▸ `table-style` = `tabular/longtable` → If you choose `list-type` = `table` you have to specify which kind of table should be used. If you choose `longtable` you have to `\usepackage{longtable}` in your preamble.

▸ `list-header` = `chapter/chapter*/section/section*/subsection/subsection*` → The header type of the list. Default: `section*`

▸ `list-name` = <list name> → The name of the list. This is what's written in the list-header. Default: `Acronyms`

▸ `list-table-width` → this has only an effect if you chose `list-type` = `table`. the second column of the table is a p column whose width can be specified with this option. Default: `.7\linewidth`

If you for example have loaded enumitem[14] you can define a custom list for the acronym list:

```
1  % preamble:
2  % \usepackage{enumitem}
3  \newlist{acronyms}{description}{1}
4  \setlist[acronyms]{labelwidth=2.5em,leftmargin=3em,noitemsep,
     itemindent=0pt}
5  \acsetup{list-type=acronyms,hyperref=false,extra-style=comma}
6  \printacronyms
```

Acronyms

CD   Compact Disc
JPG   Joint Photographic Experts Group
LA   Los Angeles
MP   Member of Parliament
NATO North Atlantic Treaty Organization, *deutsch*: Organisation des Nordatlantikvertrags
NY   New York
SW   Sammelwerk
ST   Some Test

7. hyperref Support

The option hyperref = true adds internal links from all short (or alternative) forms to the respective list entry. You should use this option with care: if you don't use \printacronyms anywhere this option will result in loads of hyperref warnings. Also printing several list can result in warnings if don't clearly separate the list into different classes. If an acronym appears in more than one list there will also be more than one hypertarget for this acronym.

A. All Acronyms Used in this Documentation

```
1  \acsetup{
2    list-type   = table,
3    table-style = longtable,
4    list-header = subsection*,
5    extra-style = comma,
6    page-ref    = comma,
7    list-name   = All Acronyms}
8  \printacronyms
```

---

[14] CTAN: enumitem

All Acronyms

CD	Compact Disc, p. 4
JPG	Joint Photographic Experts Group, p. 5
LA	Los Angeles, p. 6
MP	Member of Parliament, p. 4
NATO	North Atlantic Treaty Organization, *deutsch*: Organisation des Nordatlantikvertrags, p. 5
NY	New York, p. 4
SW	Sammelwerk, p. 4
ST	Some Test, p. 2

```
1  \acsetup{
2    list-type  = table,
3    table-style = longtable,
4    list-header = subsection*,
5    page-ref   = comma,
6    list-name  = City-Acronyms}
7  \printacronyms{city}
```

City-Acronyms

LA	Los Angeles, p. 6
NY	New York, p. 4

References

[Wik] Wikipedia. *Acronym and initialism.* URL: http://en.wikipedia.org/wiki/Acronyms (visited on 06/21/2012).

Index

Section titles are indicated **bold**, packages sans serif, commands \brown and options yellow.

X