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Typeset Acronyms

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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 separate 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.

As an experimental feature ACRO also offers the option sort which automatically sorts the list created by \printacronyms.

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1. Licence and Requirements

Permission is granted to copy, distribute and/or modify this software under the terms of the LATEX Project Public License (LPPL), version 1.3 or later (http://www.latex-project.org/lppl.txt). The software has the status "maintained."

ACRO loads and needs the following packages: expl3,¹ xparse, xtemplate, l3keys2e,² zrefabspage³ and translations⁴ [Nie15].

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. *[Wik12a]*

After WIKIPEDIA told us what acronyms are and we won't confuse them with units or other kinds of abbreviations – why would we need another package for them? There are several already: acronym [Oet15], acromake [Th095], acroterm [Vos10], the abbreviations package abbrevs [Swi01] (the current version 1.4 has a bug,⁵ though), the nomenclature package nomencl [Vey+05], and of course the mighty glossaries [Tal15a]. So there is really no *need* for a new package.

On the other hand acronym, the best of the acronym specific packages, has one or two shortcomings and sometimes using glossaries seems a bit of an overkill (or simply inconvenient as one has to run makeglossaries, makeindex or xindy, then⁶). So <u>ACRO</u> stands somewhere in between (but closer to acronym).

The main reason for the existance of ACRO is a question on TEX.sx⁷ which intrigued me and

6. Rumour has it there is going to be a version that can be used without running an external program

^{1.} ON CTAN as l3kernel: http://mirrors.ctan.org/macros/latex/contrib/l3kernel/

^{2.} on CTAN as l3packages: http://mirrors.ctan.org/macros/latex/contrib/l3packages/

^{3.} on CTAN as oberdiek: http://mirrors.ctan.org/macros/latex/contrib/oberdiek/

^{4.} on CTAN as translations: http://mirrors.ctan.org/macros/latex/contrib/translations/

^{5.} see http://tex.stackexchange.com/q/59840/5049 for solutions.

^{7.} http://tex.stackexchange.com/q/59449/5049

3. Basics

in consequence led to ACRO and it's option single.

ACRO has many similarities with the acronym package. In fact, quite some macros have the same name and meaning.8

Please take a minute to think and decide which package will suit your needs best. Are you planning to add a glossary to your book? You should probably go with glossaries, then. Are you planning to add a nomenclature? You may want to choose nomencl (or again: glossaries) and so on. ACRO does a good job for lists of abbreviations.

3. Basics

3.1. Creating New Acronyms

Acronyms are created with the command \DeclareAcronym. Changed in

$\DeclareAcronym{\langle id \rangle}{\langle list of keys \rangle}$

The basic command for declaring an acronym.

This command understands a number of keys which are listed below. Some of them are not described immediately but at appropriate places in the documentation.

$short = \{\langle text \rangle\} $ (required)
the short form of the acronym. This option is required: an acronym must have a short form.
If this is set it <i>must</i> be set as first option! If another option is set first and notices the short
option missing it assumes that the ID should be used as short version and sets it accordingly. A
warning will be written to the log then.

```
long = \{\langle text \rangle\}
```

the long form of the acronym. This option is required: an acronym must have a description.

```
short-plural = {\langle text \rangle}
```

the plural ending appended to the short form.

short-plural-form = { $\langle text \rangle$ }

theplural short form of the acronym; replaces the short form when used instead of appending Introduced in version 2.0 the plural ending.

long-plural = { $\langle text \rangle$ }

the plural ending appended to the long form.

long-plural-form = { $\langle text \rangle$ }

plural long form of the acronym; replaces the long form when used instead of appending the plural ending.

alt-plural = { $\langle text \rangle$ }

Introduced in version 2.0

version 1.0

the plural ending appended to the alternative form.

Default: s

(required)

Default: s

Default: s

^{8.} *Not* in the sense of \meaning!

Introduced in version 2.0	<pre>alt-plural-form = {\langle text\rangle} theplural alternative form of the acronym; replaces the alternative form when used instead appending the plural ending.</pre>	d of
Introduced in version 1.4	list = { $\langle text \rangle$ } if specified this will be written in the list as description instead of the long form.	
Introduced in version 1.2	short-indefinite = { $\langle text \rangle$ }Defaulindefinite article for the short form.	t: a
Introduced in version 1.2	long-indefinite = { $\langle text \rangle$ }Defaulindefinite article for the long form.	t: a
Introduced in version 1.1	long-pre = { $\langle text \rangle$ } $\langle text \rangle$ is prepended to the long form in the text but not in the list of acronyms.	
Introduced in version 1.1	long-post = { $\langle text \rangle$ } $\langle text \rangle$ is appended to the long form in the text but not in the list of acronyms.	
	alt = { $\langle text \rangle$ } alternative short form.	
Introduced in version 1.2	alt-indefinite = { $\langle text \rangle$ }Defaulindefinite article for the alternative form.	t: a
	extra = { $\langle text \rangle$ } extra information to be added in the list of acronyms.	
Introduced in version 1.3	foreign = { $\langle original \ long \ form \rangle$ } can be useful when dealing with acronyms in foreign languages, see section 3.6 on page 10 details.	for
	sort = { $\langle text \rangle$ } if used the acronym will be sorted according to this key instead of its 1D.	
	class = { $\langle text \rangle$ } the class the acronym belongs to.	
	<pre>cite = {[(prenote)][(postnote)]{(citation keys)}} a citation that is printed to the acronym according to an option explained later.</pre>	
	short-format = { $\langle T_E X \ code \rangle$ } the format used for the short form of the acronym.	
	long-format = { $\langle T_E X \ code \rangle$ } the format used for the long form of the acronym.	
	first-long-format = { $\langle T_E X \ code \rangle$ } the format used for the first long form of the acronym as set with \ac, \acf or \acflike a their uppercase, plural and indefinite forms.	and

```
3. Basics
```

```
pdfstring = {{ (text) / (plural ending) }}
                 used as PDF string replacement in bookmarks when used together with the hyperref package.
                 The appended plural ending is optional. If you leave it (and the /) the default ending is used.
              accsupp = {\langle text \rangle}
                 sets the ActualText key as presented by the accsupp package for the acronym.
              tooltip = {\langle text \rangle}
Introduced in
                 sets the tooltip description for an acronym. For actually getting tooltips you also need an
version 2.1
                 appropriate setting of the tooltip-cmd option or to set the package option tooltip.
              index-sort = {\langle text \rangle}
                 If you use the package option index every occurrence of an acronym is recorded to the index
Introduced in
version 1.1
                 and sorted by its ID or (if set) by the value of the sort key. This key allows to set an individual
                 sorting option for the index. See section 4.7 on page 15 for details.
              index = {\langle text \rangle}
                 This key allows to overwrite the automatic index entry with an arbitrary one. See section 4.7
Introduced in
version 1.1
                 on page 15 for details.
              index-cmd = {(control sequence)}
                 This key let's you set an individual index creating command for this acronym. It should be a
Introduced in
version 1.1
                 command that takes one mandatory argument. See section 4.7 on page 15 for details.
                   In its simplest form an acronym needs a short and a long form. Please note that both keys
```

must be set and that the short key must always be the first key that is set.

```
1 % preamble:
2 \DeclareAcronym{test}{
  short = ST ,
3
   long = Some Test
4
5 }
```

This creates the acronym "ST" with the ID "test" and the long form "Some Test." The format key allows you to choose a specific format for the short form of an acronym:

```
1 % preamble:
2 \DeclareAcronym{ot}{
              = ot ,
  short
3
              = Other Test ,
   long
   short-format = \scshape
```

6 }

The short form now looks like this: OT.

The **cite** key needs a bit explaining. It expects arguments like the standard **\cite** command, *i.e.*, two optional arguments setting the $\langle prenote \rangle$ and $\langle postnote \rangle$ and one mandatory argument setting the citation key.

```
1 % preamble:
2 \DeclareAcronym{ny}{
3 short = NY ,
4 short-plural = ,
5 long = New York ,
6 long-plural = ,
7 cite = {NewYork}
8 }
```

```
1 % bib file for use with biber/biblatex:
2 @online{NewYork,
3 author = {Wikipedia},
4 title = {New York City},
5 urldate = {2012-09-27},
6 url = {http://en.wikipedia.org/wiki/New_York_City},
7 year = {2012}
8 }
```

The first appearance now looks as follows⁹: New York (NY) [Wik12b].

3.2. Using the Acronyms - the Commands

Acronyms are used with one of the following commands:

 $ac *{\langle id \rangle}$

basic command; the first output is different from subsequent ones.

 $Ac * \{ \langle id \rangle \}$

same as \ac but capitalizes the first letter of the long form.

^{9.} The appearance of the citation of course depends on the citation style you're using.

3. Basics

```
\cite{acs}{\langle id \rangle}
```

short form; the actual acronym.

 $\classifier \{\langle id \rangle\}$

long form; the meaning of the acronym.

 $Acl*{(id)}$

same as \acl but capitalizes first letter.

 $aca \{ \langle id \rangle \}$

alternative short form as specified in the alt key of \DeclareAcronym; if it hasn't been specified this is identical to \acs.

 $\c(id)$

first form; output like the first time \ac is output.

```
Acf*{\langle id \rangle}
```

same as **\acf** but capitalizes first letter of the long form.

```
\ensuremath{acp*{\langle id \rangle}}\plural form of \c;
```

 $Acp * \{\langle id \rangle\}$

same as \acp but capitalizes first letter of the long form.

 $\circlet acsp*{(id)} plural form of acs;$

 $\climits define the set of $$ aclp*{(id)} plural form of $acl;$

```
\Aclp*{(id)}
same as \aclp but capitalizes first letter.
```

 $\cap*{\langle id \rangle}$ plural form of \capace ;

 $\circlet acfp*{(id)} plural form of (acf;$

```
Acfp*{\langle id \rangle}
```

same as **\acfp** but capitalizes first letter of the long form.

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.

Introduced in version 0.5

If you use the starred variant an acronym will not be marked as used. This proves useful if an acronym is typeset in a section title, for example, since then the appearance in the table of contents won't mark it as used.

3. Basics

```
1 % preamble:
2 % \DeclareAcronym{cd}{
3 % short = cd ,
4 % long = Compact Disc ,
5 % short-format = \scshape
6 % }
7 first time: \ac{cd} \\
8 second time: \ac{cd} \\
9 short: \acs{cd} \\
10 alternative: \aca{cd} \\
11 first again: \acf{cd} \\
12 long: \acl{cd} \\
13 short plural: \acsp{cd} \\
14 long plural: \aclp{cd}
```

```
first time: Compact Disc (CD)
second time: CD
short: CD
alternative: CD
first again: Compact Disc (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 formed differently. And third, other languages can have other plural endings.

For these reasons \DeclareAcronym can get the following keys:

```
short-plural = \{\langle text \rangle\}
```

The plural ending of the short form.

long-plural = { $\langle text \rangle$ }

The plural ending of the long form.

long-plural-form = { $\langle text \rangle$ }

An alternative plural form for the long form.

These keys are optional. If they're not used, the default setting is s. If you use long-plural-form the long form will be replaced by the specified plural form when necessary.

Suppose we define the following acronyms:

```
1 \DeclareAcronym{cd}{
2 short = cd ,
3 long = Compact Disc ,
4 short-format = \scshape
5 }
6 \DeclareAcronym{ny}{
7 short = NY ,
8 short-plural = ,
```

Default: s

Default: s

```
long
                = New York ,
9
    long-plural =
10
11 }
12 \DeclareAcronym{sw}{
           = SW ,
   short
13
               = Sammelwerk ,
    long
14
   long-plural = e
15
16 }
17 \DeclareAcronym{MP}{
   short
                    = MP ,
18
                    = Member of Parliament ,
   long
19
   long-plural-form = Members of Parliament
20
21 }
```

These acronyms now have the following plural appearances:

1 \acsp{cd}, \aclp{cd} \\
2 \acsp{ny}, \aclp{ny} \\
3 \acsp{sw}, \aclp{sw} \\
4 \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. For this **\DeclareAcronym** has another key:

alt = { $\langle text \rangle$ }

Alternative short form.

```
1 % preamble:
2 % \DeclareAcronym{jpg}{
3 % short = JPEG ,
4 % alt = JPG ,
5 % long = Joint Photographic Experts Group
6 % }
7 default: \acs{jpg} \\
8 alt.: \aca{jpg}
```

default: JPEG alt.: JPG 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 their meaning is explained. Sometimes it can be useful to add additional information there. This is done with another key to \DeclareAcronym:

 $extra = \{\langle text \rangle\}$

Additional information for the list of acronyms.

These information will only be displayed in the list. See section 5 on page 16 for the impact of the following example.

```
1 % preamble:
2 % \DeclareAcronym{nato}{
    short = nato ,
3 %
                  = North Atlantic Treaty Organization ,
 %
     long
5 %
     extra
                  = \textit{deutsch}: Organisation des Nordatlantikvertrags ,
     short-format = \scshape
6 %
7 % }
8 The \ac{nato} is an intergovernmental military alliance based on the
_{9} North Atlantic Treaty which was signed on 4~April 1949. \ac{nato}
10 headquarters are in Brussels, Belgium, one of the 28 member states
<sup>11</sup> across North America and Europe, the newest of which, Albania and
<sup>12</sup> 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.

3.6. Foreign Language Acronyms

Introduced in version 1.3

I repeatedly read the wish for being able to add translations to acronyms when the acronyms stem from another language than the document language, *i.e.*, something like the following in a German document:

₁ \ac{ecu}\\	Steuergerät (Electronic Control Unit, ECU)
2 \ac{ecu}	ECU

That's why I decided to add the following key:

```
foreign = {(original long form)}
```

A description for an acronym originating in another language than the document language.

Here is the definition of the above mentioned ECU acronym:

```
1 \DeclareAcronym{ecu}{
2 short = ECU ,
3 long = Steuerger\"at ,
4 foreign = Electronic Control Unit
5 }
```

As you have seen this adds the foreign entry to the first appearance of an acronym. It is also added in parentheses to the list of acronyms after the long entry. Actually the entry there is the argument to the following command:

```
\constant{acroenparen}{\constant{acroenparen}}
```

Places $\langle argument \rangle$ in parentheses: $acroenparen \{example\}$: (example). See page 20 for a way to customize this other than redefining it.

4. Additional Commands and Possibilities

4.1. Indefinite Forms

Introduced in version 1.2

Unlike many other languages¹⁰ in English the indefinite article is not determined by the grammatical case, gender or number but by the pronounciation of the following word. This means that the short and the long form of an acronym can have different indefinite articles. For these cases ACRO offers the keys short-indefinite, alt-indefinite and long-indefinite whose default is a. For every lowercase singular command two alternatives exist, preceded by i and I, respectively, which output the lowercase and uppercase version of the corresponding indefinite article.

```
1 % preamble:
2 % \DeclareAcronym{ufo}{
3 % short = UFO ,
4 % long = unidentified flying object ,
5 % long-indefinite = an
6 % }
7 \Iac{ufo}; \iacs{ufo}; \iacl{ufo}
```

^{10.} Let's better say: unlike the other languages where I know at least the basics.

An unidentified flying object (UFO); a UFO; an unidentified flying object

4.2. Uppercasing

\acfirstupper{{token list}}

Introduced in version 1.3e

This command uppercases the first token in $\langle token \ list \rangle$. The command is less powerful than $\mbox{makefirstuc}$ that is provided by the mfirstuc package [Tal15b] but it is expandable. Obvious downsides are for example that it does not uppercase accented letters.

4.3. Simulating the First Appearance

Introduced in version 1.2

Users told me¹¹ that there are cases when it might be useful to have the the acronym typeset according to the first-style but with another text than the long form. For such cases ACRO offers the following commands.

$\ensuremath{acflike*{\langle id \rangle}}{\langle instead of long form \rangle}$

Write some alternative long form for acronym with ID $\langle id \rangle$ as if it were the first time the acronym was used.

```
\ensuremath{acfplike}{\langle id \rangle} {\langle instead of long form \rangle}
Plural form of \ensuremath{acflike}.
```

<pre>1 \acsetup{first-style=footnote}</pre>	NY ^a
<pre>2 \acflike{ny}{the big apple}</pre>	a. the big apple [Wik12b]

The plural ending in \acfplike is only appended to the short form. It makes no sense to append it to the text that is inserted manually anyway. Note that whatever text you're inserting might be gobbled depending on the first-style you're using.

4.4. 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 on page 16. For this \DeclareAcronym has an additional key:

 $class = \{\langle text \rangle\}$

Associated class for an acronym.

This might be useful if you can and want to divide your acronyms into different types, technical and grammatical ones, say, that shall be listed in different lists.

^{11.} Well – one, to be precise ;)

4. Additional Commands and Possibilities

```
1 % preamble:
2 % \DeclareAcronym{la}{
_3 % short = LA ,
4 % short-plural = ,
5 % long = Los Angeles ,
6 % long-plural = ,
7 % class = city
8 % }
                                       Los Angeles (LA)
9 % \DeclareAcronym{ny}{
                                       New York (NY)
10 % short = NY,
11 %
    short-plural = ,
12 %
    long = New York ,
13 % long-plural = ,
_{14} % class = city ,
₁₅ % cite
               = NewYork
16 % }
17 \acl{la} (\acs{la}) \\
18 \acl{ny} (\acs{ny})
```

4.5. Reset or Mark as Used, Test if Acronym Has Been Used

If you want for some reason to fool **ACRO** into thinking that an acronym is used for the first time you can call one of these commands:

 \circleta

Introduced in version 0.5

This will reset a used acronym such that the next use of \ac will again print it as if it were used the first time. This will *not* remove an acronym from being printed in the list if it actually *has* been used before.

\acresetall

Reset all acronyms.

$\cifused{\langle id \rangle}{\langle true \rangle}{\langle false \rangle}$

Introduced in version 1.3e

This command tests if the acronym with ID $\langle id \rangle$ has already been used and either puts true or false in the input stream.

1 \acreset{ny}\ac{ny}

New York (NY) [Wik12b]

Beware that both commands act *globally*! There are also commands that effectively do the opposite of \acreset, *i.e.*, mark acronyms as used:

$\circle comma separated list of ids \}$

Introduced in version 0.5

ed in This has the same effect as if an acronym had been used twice, that is, further uses of ac will 5^{5}

print the short form and the acronym will in any case be printed in the list (as long as its class is not excluded).

\acuseall

Introduced in Mark all acronyms as used.

4.6. \ac and Friends in PDF Bookmarks, Accessibility Support, Tooltips

4.6.1. *PDF* Bookmarks

ACRO's commands usually are not expandable which means they'd leave unallowed tokens in PDF bookmarks. hyperref offers \texorpdfstring to circumvent that issue manually but that isn't really a nice solution. What's the point of having macros to get output for you if you have to specify it manually after all?

Introduced in version 0.5

version o 6a

That is why ACRO offers a preliminary solution for this. In a bookmark every \ac like command falls back to a simple text string typesetting what \acs would do (or \acsp for plural forms). These text strings both can accessed manually and can be modified to an output reserved for PDF bookmarks.

```
\cline{acpdfstring}{\langle id \rangle}
```

Access the text string used in PDF bookmarks.

```
\cline{acpdfstringplural}{\langle id \rangle}
```

Access the plural form of the text string used in PDF bookmarks.

pdfstring = {{ \pdfstring \/ \plural ending \}}

Key for \DeclareAcronym to declare a custom text string for PDF bookmarks. The plural ending can be set optionally.

For example the PDF acronym used in the title for this section is defined as follows:

```
1 \DeclareAcronym{pdf}{
2 short = pdf,
3 long = Portable Document Format,
4 format = \scshape,
5 pdfstring = PDF,
6 accsupp = PDF
7 }
```

4.6.2. Accessibility Support

The last example also demonstrates the accsupp key. The idea is to have something different visible in the PDF file compared to what you get when you select and copy the corresponding

4. Additional Commands and Possibilities

string. In the example visible string is a lowercase pdf in small caps while the string copied is an uppercase PDF.

For this to work you need to use the *package option* accsupp, too, which will load the package accsupp if it isn't loaded by the user already. Then the key accsupp will set the ActualText property of \BeginAccSupp. Please refer to accsupp's documentation for details. To see its effect copy PDF and paste it into a text file. You should get uppercase letters instead of lowercase ones.

accsupp = { $\langle text \rangle$ }

Introduced in version 1.0

Key for \DeclareAcronym to set the ActualText property of \BeginAccSupp (see accsupp's documentation for details) to be used for an acronym. It only has an effect when the package option accsupp is used, too.

4.6.3. Tooltips

The idea of a tooltip is to have some text shown when you hover with the mouse over the short form of an acronym. This is only available in some PDF viewers, though. On possibility for such tooltips is loading the pdfcomment package [Kle12] and using its \pdftooltip macro.

Default: false

Default: \@firstoftwo

tooltip = true|false

This options loads the pdfcomment package and sets the command for creating tooltips to \pdftooltip.

tooltip-cmd = {(control sequence)}

Introduced in version 2.1

Introduced in version 2.1

This allows users using another macro for tooltips – maybe one provided by another package or some own macro. It needs to be a macro with two mandatory arguments, the first being the string typeset in the PDF, the second being the tooltip description text.

For using this with acronyms they have a property tooltip which can be used inside \DeclareAcronym for specifying the description text of the tooltip. If the tooltip package option is used but the property is not set for an acronym then the long property is used instead.

If an acronym is used inside of another acronym then the tooltips of the "inner" acronyms are disabled.

4.7. Adding Acronyms to the Index

Introduced in version 1.1

ACRO has the package option index. If it is used an index entry will be recorded every time an *unstarred* acronym command is used. The index entry will be $\langle id \rangle @\langle short \rangle$, $\langle sort \rangle @\langle short \rangle$ if the sort key has been set, $\langle index-sort \rangle @\langle short \rangle$ if the index-sort has been set, or $\langle index \rangle$ if the key index has been set for the specific acronym. The short versions appearing there are formatted according to the chosen format of the corresponding acronym, of course.

This document demonstrates the feature. You can find every acronym that has been declared in the index. In order to allow flexibility the indexing command can be chosen both globally via package option and individually for every acronym. This would allow to add acronyms to a specific index if more than one index is used, for example with help of the imakeidx package.

5. Printing the List

I'm not yet convinced this is a feature many people if anyone needs and if they do if it is flexible enough. If you have any thoughts on this I'd appreciate an email.

5. Printing the List

```
Changed in
version 1.0
```

Changed in version 1.3

version 1.3

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

```
\printacronyms[(options)]
  Print the list of acronyms.
```

The commands takes a few options, namely the following ones:

```
include-classes = { (list of classes) }
```

Takes a comma-separated list of the classes of acronyms that should be in the list.

```
exclude-classes = { (list of classes) }
```

Takes a comma-separated list of the classes of acronyms that should not be in the list.

```
name = {\langle name \ of \ the \ list \rangle}
   sets the name for the list.
```

heading = { \langle sectioning command without leading backslash \rangle } Default: section* Sets the sectioning command for the heading of the list. A special value is none which suppresses the heading.

sort = true|false Set sorting for this list only. Introduced in

Default: true

```
1 \acsetup{extra-style=comma}
2 \printacronyms[exclude-classes=city]
4 \printacronyms[include-classes=city,name={City Acronyms}]
```

Acronyms

CD Compact Disc

CTAN Comprehensive TFX Archive Network

ECU Steuergerät (Electronic Control Unit)

ID identification string

JPEG Joint Photographic Experts Group

MP Member of Parliament

NATO North Atlantic Treaty Organization, deutsch: Organisation des Nordatlantikvertrags

PDF Portable Document Format

SW Sammelwerk

ST Some Test

UFO unidentified flying object

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.

The command \printacronyms needs two LATEX runs. This is a precaution to avoid error messages with a possibly empty list. But since almost all documents need at least two runs and often are compiled much more often than that, this fact shouldn't cause too much inconvenience.

6. Options and Customization

6.1. General Options

There are a few options which change the general behaviour of ACRO. Underlined values are used if no value is given.

Introduced in version 1.6	<pre>messages = silent loud Def Setting messages = {silent} will turn all of ACRO's error messages into warnings ACRO's warnings into info messages. Be sure to check the log file carefully if you de this option.</pre>	
	single = truefalseDefaIf set to true an acronym that's used only once (with \ac) in a document will only acronym in a specified form and will not be printed in the list.	ult: false / print the
Introduced in	<pre>single-form = long short alt first Def Determines how a single appearance of an acronym is printed if single = {true}</pre>	fault: long has been

version 2.

hyperref = true|false

chosen.

If set to true the short forms of the acronyms will be linked to their list entry.

Default: false

Introduced in version 1.5	label = <u>true</u> false If set to true this option will place \label{ $\langle prefix \rangle \langle id \rangle$ } the first time the across is used.	Default: false nym with ID $\langle id angle$
Introduced in	<pre>label-prefix = { (text) } The prefix for the \label that is placed when option label = {true} is used.</pre>	Default: ac:
version 1.5	<pre>record-pages = true false Since ACRO can handle arabic, roman and Roman page numbers but not a numbering this option allows to turn the page number recording off for these lead to errors else. This affects the whole document and can only be set in means you cannot have page numbers in the list of acronyms in this case. Or you use pages = {first}.</pre>	cases as it would the preamble! It
	<pre>only-used = true false This option is true as default. It means that only acronyms that are actu document are printed in the list. If false, all acronyms defined with \Declar written to the list.</pre>	•
Introduced in version 1.2	<pre>mark-as-used = first any This option determines wether an acronym is mark as used when the first forr time (with \ac, \acf or \acflike and their uppercase, plural and indefinite for of the \ac-like commands is used.</pre>	
	macros = <u>true</u> false If set to true this option will create a macro $\langle id \rangle$ for each acronym as a shorte Already existing macros will <i>not</i> be overwritten.	Default: false cut for $ac{\langle id \rangle}$.
Introduced in version 0.6	<pre>xspace = true false If set to true this option will append \xspace from the xspace package to the co with the macros option.</pre>	Default: false ommands created
	<pre>strict = true false If set to true and the option macros = {true} is in effect then already existin overwritten.</pre>	Default: false g macros will be
	<pre>sort = true false If set to true the acronym list will be sorted automatically. The entries are so ignoring upper and lower case. This option needs the experimental package I3experimental bundle) and can only be set in the preamble.</pre>	•
	<pre>cite = all first none This option decides whether citations that are added via cite are added to ea no appearance of an acronym.</pre>	Default: first ch first, every or
	<pre>cite-cmd = {(control sequence)} This option determines which command is used for the citation. Each citatio takes the cite key as argument is valid, for example biblatex's \footcite.</pre>	Default: \cite n command that

	Depending on the citation command in use a space should be inserte	
	maybe not (e.g. \footcite). This option allows you to set this. Ac place arbitrary code right before the citation.	tually it can be used to
Introduced in version 2.0	<pre>group-citation = true false If set to true the short form (or the long form) and the citation of an a together in parentheses when an acronym is used the first time.</pre>	Default: false cronym will be printed
Introduced in version 2.0	<pre>group-cite-cmd = {\control sequence\} This option determines which command is used for the citation when first time and group-citation = {true}. Each citation command the argument is valid, for example biblatex's \footcite.</pre>	•
Introduced in version 1.1	<pre>index = true false If set to true an index entry will be recorded every time an unstarred used for the corresponding acronym.</pre>	Default: false d acronym command is
Introduced in	<pre>index-cmd = {(control sequence)} Chooses the index command that is used when option index has been</pre>	Default: \index set to true.
version 1.1 Introduced in	<pre>accsupp = true false Activates the access support as provided by the accsupp package.</pre>	Default: false
version 1.0 Introduced in	<pre>tooltip = true false Activates tooltip support for ACRO using the pdfcomment package.</pre>	Default: false
version 2.1 Introduced in version 2.1	<pre>tooltip-cmd = {(control sequence)} A macro taking two mandatory arguments, the first being the short fo the second being some tooltip description.</pre>	Default: \@firstoftwo orm of the acronym and
	<pre>uc-cmd = {\control sequence\} The command that is used to capitalize the first word in the \Ac and t can change it to another one like for example \makefirstuc¹² or \Mak</pre>	
	All options of this and the following sections can be set up either as the setup command:	package options or via
	\acsetup{\options\} Set up ACRO anywhere in the document. Or separate package loading	from setup.

1 % with \acsetup{macros}
2 we could have used these before: \nato, \ny

^{12.} from the mfirstuc package

^{13.} from the textcase package

```
we could have used these before: NATO, NY
```

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.

	<pre>short-format = {\format\} Sets a format for all short forms. For example short-format = {\scshape short forms in small caps.</pre>	(initially empty) e} would print all
	long-format = { $\langle format \rangle$ } The same for the long forms.	(initially empty)
Introduced in	foreign-format = { $\langle format \rangle$ } The format for the foreign entry when it appears as part of the first appeara	(initially empty) nce of an acronym.
version 1.3 Introduced in version 1.2	<pre>first-long-format = { (format) } The format for the long form on first usage (with \ac, \acf or \acflike an plural and indefinite forms).</pre>	(initially empty) ad their uppercase,
Introduced in version 1.1	list-short-format = { $\langle format \rangle$ } An extra format for the short entries in the list. If not used this is the same Please be aware that a call of short-format after this one will overwrite it a	
	<pre>list-long-format = { (format) } An extra format for the long entries in the list. If not used this is the sam Please be aware that a call of long-format after this one will overwrite it ag</pre>	
	list-foreign-format = { (format) } Defau The format for the foreign entry as it appears in the list. This may be cod macro that takes a mandatory argument.	ult: \acroenparen e that ends with a
	extra-format = { $\langle format \rangle$ } The same for the extra information.	(initially empty)
Changed in version 1.1	<pre>first-style = default plain empty square short reversed plain-rev sidenote The basic style of the first appearance of an acronym. The value sidenote no \sidenote to be defined for example by the sidenotes package.</pre>	Default: default
	<pre>extra-style = default plain comma paren bracket Defines the way the extra information is printed in the list.</pre>	Default: default
	<pre>plural-ending = { (tokenlist) }</pre>	Default: s

With this option the default plural ending can be set.

```
1 % (Keep in mind that we're in
2 % a minipage here!)
3 \acsetup{first-style=empty}
_4 \in \{ny\} \in
5 \acsetup{first-style=footnote}
6 \acf{ny} \\
7 \acsetup{first-style=square}
& \acf{ny} \\
9 \acsetup{first-style=short}
10 \acf{ny} \\
11 \acsetup{first-style=reversed}
12 \acf{ny} \\
13 \acsetup{first-style=plain}
14 \acf{ny} \\
15 \acsetup{first-style=plain-reversed}
16 \acf{ny}
```

```
NY
NY<sup>a</sup>
New York [NY] [Wik12b]
NY [Wik12b]
NY (New York) [Wik12b]
New York – NY [Wik12b]
NY – New York [Wik12b]
```

a. New York [Wik12b]

6.3. Options Regarding the List

	<pre>page-ref = none plain comma paren If this option is set to a value other than none the page numbers of the are printed in the list. Please note that this is an experimental feature number of cases. If you notice anything please send me an email!</pre>	
Introduced in version 1.5	<pre>pages = all first If the option page-ref has any value other than none this option dete of the acronyms are listed or only the first time. Implicitly sets label</pre>	2
	<pre>page-name = {\langle page name\rangle} The "name" of the page label. This is automatically translated to the a for the time being there are many translations missing, yet. Please ne language missing.</pre>	0 0
Introduced in version 1.0	<pre>pages-name = {\langle page name plural\rangle} The "name" of the page label when there are more than one page. This is to the active language. However for the time being there are many to Please notify me if you find your language missing.</pre>	-
Introduced in version 1.3	<pre>following-page = true false If set to true a page range in the list of acronyms that consists of two the first page and an appended f. This depends on the option next-p</pre>	10
Introduced in version 1.3	<pre>following-pages = true false If set to true a page range in the list of acronyms that set consists of r be written by the first page and an appended ff. This depends on the</pre>	

Introduced in version 1.0	<pre>next-page = { \langle text \rangle } Appended to a page number when following-page is set long. This is automatically translated to the active languag are many translations missing, yet. Please notify me if yo</pre>	ge. However, for the time being there
Introduced in version 1.0	<pre>next-pages = { \langle text \rangle } Appended to a page number when following-pages is set pages long. This is automatically translated to the active la there are many translations missing, yet. Please notify me</pre>	anguage. However, for the time being
Changed in version 2.2	<pre>list-style = description lof longtable extra-lo extra-tabular extra-tabular-rev tabular toc Choose with which style the list of acronyms should be extra-longtable or extra-longtable-rev you have to l your preamble. The values extra-(something) put the extra Be aware that per default all extra-table styles only use l can easily get longer that a line you should probably define y See section 13 on page 31 for details.</pre>	Default: description e typeset. If you choose $\langle longtable \rangle$, load the longtable [Car14] package in ra information in a column of it own. columns. Since acronym descriptions
Changed in version 2.0	<pre>list-heading = chapter chapter* section section subsubsection subsubsection* addchap addsec none The heading type of the list. The last two only work with a the appropriate command. A special value is none which</pre>	Default: section* KOMA-Script class that also defines
	<pre>list-name = { (list name) } The name of the list. This is what's written in the list-head to the active language. However, for the time being there Please notify me if you find your language missing.</pre>	
	<pre>list-caps = true false Print the first letters of the long form capitalized.</pre>	Default: false
	7. Trailing Tokens and Special Action	

Introduced in version 2.0

ACRO has the possibility to look ahead for certain tokens and switch a boolean if it finds them. Per default ACRO knows about three tokens: the "dot" (.), the "dash" (-) and the "babel-hyphen" (\babelhyphen).

A token is made known to **ACRO** with the following macro:

\AcroRegisterTrailing(*token*){(*name*)}

This registers the token $\langle token \rangle$ so ACRO looks if it follows directly after an acronym macro. $\langle name \rangle$ is the internal name for this token.

The **ACRO** package already registers the above mentioned tokens:

```
1 \AcroRegisterTrailing . {dot}
2 \AcroRegisterTrailing - {dash}
3 \AcroRegisterTrailing \babelhyphen {babel-hyphen}
```

If a token is registered it doesn't mean that **ACRO** looks for it. The token must first be activated for this:

activate-trailing-tokens = { (csv list of token names) }

Tell **ACRO** to look for trailing tokens. This is done by giving a csv list of the internal *names* of the tokens. Per default only dot is activated.

```
deactivate-trailing-tokens = { (csv list of token names) }
```

Tell **ACRO** not to look for trailing tokens. This is done by giving a csv list of the internal *names* of the tokens.

All of the above on its own does nothing visible. However: inside of an acronym, *i. e.*, for example inside the long or the short form it can be tested for those trailing tokens:

```
\ciftrailing{(csv list of token names)}{(true)}{(false)}
```

Check if one of the tokens listed in $\langle csv \ list \ of \ token \ names \rangle$ is following and either place $\langle true \rangle$ or $\langle false \rangle$ in the input stream.

ACRO uses this to define to further macros:

\acdot

Inserts a . if no dot follows.

\acspace

Inserts a \space if no dash or babel-hyphen follows.

The definitions are equivalent¹⁴ to the following code:

```
1 \newcommand*\acdot{\aciftrailing{dot}{}{.\@}}
```

```
2 \newcommand*\acspace{\aciftrailing{dash,babel-hyphen}{}{\space}}
```

This could be used to define an acronym as follows:

^{14.} Not quite: ACRO's definitions are engine protected.

1 \DeclareAcronym{etc}{
2 short = {\textit{etc}\acdot} ,
3 long = {\textit{et cetera}} ,
4 short-plural = , long-plural =
5 }

If now you somewhere use

 $1 \setminus ac{etc}.$

there won't be two dots printed.

The command **\acspace** is used already in the definition of the first appearance of a macro. Let's say you're a German chemist and you have

```
1 \DeclareAcronym{PU}{
2 long = Polyurethan ,
3 long-plural = e
4 }
```

and you use it the first time like this:

```
1 \ac{PU}-Hartschaum
```

then according to German orthography and typesetting rules this should be printed as

"Polyurethan(PU)-Hartschaum"

i. e., with *no* space between long and short form. This is exactly what happens it you say

\acsetup{activate-trailing-tokens = {dash,babel-hyphen}}

in the preamble.

8. About Page Ranges

If you enable the page-ref option ACRO adds page numbers to the list of acronyms. In version o.* it would add a page reference for an acronym in the list of acronyms that used \pageref to refer to the first appearance of an acronym. This is retained using pages = {first}. Version 1.0 uses a different approach that doesn't use a label but instead will list *all* pages an acronym appeared on. With hyperref the pages are referenced using \hyperpage.

There are some options that control how this list will be typeset, e.g., following-page, next-pages or the option page-ref itself. It is important to mention that the page list will always take at least two compilation runs until changes in the options or the actual page numbers affect it. This is due to the fact that the updated sequence is first written to the aux file and only read in during the next run.

9. Language Support

ACRO detects if packages babel or polyglossia are being loaded and tries to adapt certain strings to match the chosen language. However, due to my limited language knowledge only a few translations are provided. I'll show how the English translations are defined so you can add the translations to your preamble if needed. Even better would be you'd send me a short email at contact@mychemistry.eu with the appropriate translations for your language and I'll add them to ACRO.

```
1 \DeclareTranslation{English}{acronym-list-name}{Acronyms}
```

```
2 \DeclareTranslation{English}{acronym-page-name}{p.}
```

```
3 \DeclareTranslation{English}{acronym-pages-name}{pp.}
```

```
4 \DeclareTranslation{English}{acronym-next-page}{f.}
```

```
5 \DeclareTranslation{English}{acronym-next-pages}{ff.}
```

10. hyperref Support

The option hyperref = {true} adds internal links from all short (or alternative) forms to their respective list entries. Of course this only works if you have loaded the hyperref package in your preamble. 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 lists can result in warnings if don't clearly separate the lists into different classes. If an acronym appears in more than one list there will also be more than one hypertarget for this acronym.

Using hyperref will also add \hyperpage to the page numbers in the list (provided they are displayed in the style chosen). Like with an index the references will thus not point to the acronyms directly but to the page they're on.

11. Defining Own Acronym Macros

Introduced in version 2.0

The commands explained in section 3.2 on page 6 have all been defined with a dedicated command – there is a family of dedicated commands, actually:

$\ensuremath{\mathsf{NewAcroCommand}}{\langle cs \rangle} \{ \langle code \rangle \}$

Defines a new ACRO acronym command $\langle cs \rangle$. This sets up the necessary framework needed by acronym commands and defines $\langle cs \rangle$ with an optional star argument and a mandatory argument for the acronym id using xparse's \NewDocumentCommand. Inside $\langle code \rangle$ one can refer to the ID $\langle id \rangle$ with #1.

Defines a new ACRO acronym command $\langle cs \rangle$. This sets up the necessary framework needed by acronym commands and defines $\langle cs \rangle$ with an optional star argument and a mandatory argument for the acronym id using xparse's \RenewDocumentCommand. Inside $\langle code \rangle$ one can refer to the ID $\langle id \rangle$ with #1.

$\DeclareAcroCommand{(cs)}{(code)}$

Defines a new ACRO acronym command $\langle cs \rangle$. This sets up the necessary framework needed by acronym commands and defines $\langle cs \rangle$ with an optional star argument and a mandatory argument for the acronym id using xparse's \DeclareDocumentCommand. Inside $\langle code \rangle$ one can refer to the ID $\langle id \rangle$ with #1.

$\Pr (code) \{ (code) \}$

Defines a new ACRO acronym command $\langle cs \rangle$. This sets up the necessary framework needed by acronym commands and defines $\langle cs \rangle$ with an optional star argument and a mandatory argument for the acronym id using xparse's \ProvideDocumentCommand. Inside $\langle code \rangle$ one can refer to the ID $\langle id \rangle$ with #1.

Inside these macros one can use a number of low-level expl3 commands.¹⁵

Acronym fetching commands

$\circletein \{\langle id \rangle\}$

Fetches the acronym using either the first or the short form depending on earlier uses.

\circleta

Fetches the short form of the acronym.

$\circlong:n {\langle id \rangle}$

Fetches the long form of the acronym.

\circleta \cir

Fetches the alternative short form of the acronym.

^{15.} Which is why you need to use them inside an expl3 programming environment. This means in the preamble surround the definitions with \ExplSyntaxOn and \ExplSyntaxOff.

11. Defining Own Acronym Macros

$\column{delta} cro_foreign:n {(id)}$

Fetches the foreign property of the acronym if available.

\circleta

Fetches the extra property of the acronym if available.

Acronym setup commands

\acro_first_upper:

ACRO setup command which tells the macros above that we want to uppercase the first letter of the long version. Should be used *before* one of the acronym fetching commands.

\acro_plural:

ACRO setup command which tells the macros above that we want to use plural forms. Should be used *before* one of the acronym fetching commands.

\acro_indefinite:

ACRO setup command which tells the macros above that we want to add the indefinite article. Should be used *before* one of the acronym fetching commands.

\acro_cite:

ACRO setup command which tells the macros above that we want to add the citation in any case independent of the option cite. Should be used *before* one of the acronym fetching commands.

\acro_no_cite:

ACRO setup command which tells the macros above that we want to have no citation independent of the option cite. Should be used *before* one of the acronym fetching commands.

\acro_index:

ACRO setup command which tells the macros above that we want to add an index entry in any case independent of the option index. Should be used *before* one of the acronym fetching commands.

\acro_reset_specials:

Introduced in version 2.0b

This macro is called implicitly by \NewAcroCommand and \NewPseudoAcroCommand. If you plan to define an Acro command by yourself using \NewDocumentCommand this should be the first macro after \acro_begin:. It ensures that in nested acronyms the inner acronyms don't inherit indefinite articles, uppercasing, endings...

Additional macros for further uses

\acro_begin:

When an acronym macro is defined "by hand", *i. e., not using* *NewAcroCommand* then this must be the first macro in the code. *Must have a matching* *acro_end*:.

\acro_end:

When an acronym macro is defined "by hand", *i. e., not using* *NewAcroCommand* then this must be the last macro in the code. *Must have a matching* *acro_begin:*.

```
\content acro_check_and_mark_if:nn {(boolean expression)} {(id)}
```

Checks if the acronym with the ID $\langle id \rangle$ exists and marks it as used when $\langle boolean \rangle$ expression evaluates to true. This macro is used inside \NewAcroCommand and friends implicitly.

 $\circleck_acronym:nn {\langle id \rangle} {true|false}$

Checks if the acronym with the ID $\langle id \rangle$ exists and marks it as used if true or doesn't. This macro is used inside \acro_check_and_mark_if:nn.

\acro_use_acronym:n {true|false}

Tell \acro_use:n and similar commands wether to mark the acronym as used or not. This macro is used inside \acro_check_acronym:nn. If this macro is used explicitly it should be used before \acro_use:n (or a similar command) otherwise it has no effect. An acronym marked as used cannot be unmarked.

 $\column{a} cro_mark_as_used:n {(id)}$

Explicitly use the acronym with the ID $\langle id \rangle$. This is the expl3 macro applied to all entries in $\langle acuse$.

```
* \acro_if_acronym_used:nTF {{id}} {{crue} } {{crue} }
```

The code-level version of \acifused. This macro is expandable.

```
\code \ \code \
```

Loops over all acronyms known when the macro is used. Inside of $\langle code \rangle$ you can refer to the ID $\langle id \rangle$ of an acronym with #1.

Examples The usage of above macros is best explained with a few examples. The following definition is done by **ACRO**:

1 \NewAcroCommand \ac { \acro_use:n {#1} }

An equivalent definition for \ac would be

```
1 \NewDocumentCommand \ac {sm}
2 {
3   \acro_begin:
4   \acro_reset_specials:
5   \acro_check_and_mark_if:nn {#1} {#2}
6   \acro_use:n {#2}
7   \acro_end:
8 }
```

which should explain what the actual framework is which \NewAcroCommand adds. Other definitions by ACRO are for example the following ones:

```
NewAcroCommand \Ac
    {
2
      \acro_first_upper:
3
      \acro_use:n {#1}
4
    }
5
6 \NewAcroCommand \iac
    {
7
      \acro_indefinite:
8
      \acro_use:n {#1}
9
    }
10
NewAcroCommand \acp
    {
12
      \acro_plural:
13
      \acro_use:n {#1}
14
   }
15
16 \NewAcroCommand \Acp
    {
17
      \acro_plural:
18
      \acro_first_upper:
19
      \acro_use:n {#1}
20
    }
21
22 \NewAcroCommand \Aclp
    {
23
      \acro_plural:
24
      \acro_first_upper:
25
      \acro_long:n {#1}
26
    }
27
```

12. About Plural Forms, Possessive Forms and Similar Constructs – the Concept of Endings

ACRO has a concept of endings. All of ACRO's plural options are defined by saying

1 \ProvideAcroEnding {plural} {s} {s}

The command's syntax and what it does is as follows:

```
\ensuremath{\mathsf{ProvideAcroEnding}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{\mathsf{croEnding}}}{\ensuremath{
```

This macro defines the options

- • $\langle name \rangle$ -ending,
- •short- $\langle name \rangle$ -ending,
- •alt- $\langle name \rangle$ -ending and
- •long- $\langle name \rangle$ -ending.

It also defines the acronym properties

```
•short-\langle name \rangle,
•short-\langle name \rangle-form,
•alt-\langle name \rangle,
•alt-\langle name \rangle-form,
•long-\langle name \rangle and
```

•long-(*name*)-form.

Additionally it defines a setup macro as described in section 11 on page 26, $\langle acro_{name} \rangle$: If $\langle name \rangle$ contains a - (dash) it is replaced by _ before $\langle acro_{name} \rangle$: is built. So if you choose my-name the corresponding macro is named $\langle acro_my_name$: If you use any other non-letters you are on your own.

Note that you must use \ProvideAcroEnding before any acronym definition!

This could be used together with the macros described in section 11 on page 26 for adding support for possessive forms:

```
1 \ExplSyntaxOn
2 % this now only works because I've use the same already in the preamble so
3 % it does nothing here:
4 \ProvideAcroEnding {possessive} {'s} {'s}
5
6 \ProvideAcroCommand \acg
7 {
8 \acro_possessive:
9 \acro_use:n {#1}
10 }
11 \ExplSyntaxOff
12 The \acg{cd} booklet says\ldots
```

The CD's booklet says...

Please note that different endings are cumulative which you probably want to avoid! Imagine a macro

```
1 \NewAcroCommand \acgp
2 {
3     \acro_possessive:
4     \acro_plural:
5     \acro_use:n {#1}
6 }
```

This would give "CDS's" instead of "CDS'". To solve this you might want to consider

```
1 \ProvideAcroEnding {possessive-singular} {'s} {'s}
2 \ProvideAcroEnding {possessive-plural} {s'} {s'}
```

13. More on List Customization

13.1. Own List Style

The different existing list styles are all built from four different templates, list, list-of, table and extra-table. Those templates are defined with the help of the xtemplate package (from [L₃P]). Each of these templates has a few options which are described in table 1 on the next page. New list styles now are defined via the following macro:

\DeclareAcroListStyle{(name)}{(template)}{(options)}

Declares a new ACRO list style $\langle name \rangle$. $\langle name \rangle$ will be the value which can be chosen in the option list-style. $\langle template \rangle$ is the name of the template to be used by the style. Available styles are listed in table 1. $\langle options \rangle$ are the option settings for the corresponding template.

For defining new styles you need some information on what the different templates and options do:

- The option list of the list template sets the list environment. This must be a classic LATEX list where items are listed with \item. In those lists short entries will always be fed as optional argument to \item:
 \item[{short}]{long}{extra}{page}
- The template list-of simulates a table of contents or a list of figures. This can be chosen by setting the option style to either toc or lof.
- The template table typesets the list in a table with two columns: (short) & (long)(extra)(page) \tabularnewline
- The template extra-table typesets the list in a table with four columns: (short) & (long) & (extra) & (page) \tabularnewline

Template	Option	Option Type Default					
list	list foreign-sep reverse before after	tokenlist tokenlist boolean tokenlist tokenlist	description \ <mark>space</mark> false				
list-of	style foreign-sep reverse before after	tokenlist tokenlist boolean tokenlist tokenlist	toc \ <mark>space</mark> false				
table	table table-spec foreign-sep reverse before after	tokenlist tokenlist tokenlist boolean tokenlist tokenlist	tabular lp{.7\linewidth} \space false				
extra-table	table table-spec foreign-sep reverse before after	tokenlist tokenlist tokenlist boolean tokenlist tokenlist	tabular llll \ <mark>space</mark> false				

TABLE 1: Available List Templates and Their Options

- The option foreign-sep is the code inserted between long form and foreign entry (if a foreign entry is present).
- The options before and after are inserted directly before and after the complete list.
- The option reverse switches the place of $\langle long \rangle$ with $\langle extra \rangle$.
- The option table-spec sets the column types for the table templates. It must correspond to the number of columns the corresponding template uses.

As an example let's define a style longtabu which uses the corresponding table environment from the package tabu [Che11]:

```
1 \usepackage{tabu,longtable}
2 \DeclareAcroListStyle{longtabu}{table}{
3 table = longtabu ,
4 table-spec = @{}>{\bfseries}lX@{}
5 }
6 \acsetup{list-style=longtabu}
```

As another example let's define a new list with the help of the enumitem package [Bez11]:

```
1 % preamble:
2 % \usepackage{enumitem}
3 \newlist{acronyms}{description}{1}
4 \newcommand*\addcolon[1]{#1:}
5 \setlist[acronyms]{
6 labelwidth = 3em,
7 leftmargin = 3.5em,
8 noitemsep,
9 itemindent = 0pt,
10 font=\addcolon}
11 \DeclareAcroListStyle{mystyle}{list}{ list = acronyms }
12 \acsetup{ list-style = mystyle }
```

This would look as follows:

Acronyms

CD: Compact DiscCTAN: Comprehensive TFX Archive Network

14. Configuration Files

- ECU: Steuergerät (Electronic Control Unit)
- **ID:** identification string
- JPEG: Joint Photographic Experts Group
- LA: Los Angeles
- MP: Member of Parliament
- NATO: North Atlantic Treaty Organization, deutsch: Organisation des Nordatlantikvertrags
- NY: New York
- PDF: Portable Document Format
- SW: Sammelwerk
- ST: Some Test
- **UFO:** unidentified flying object

13.2. Own List Heading Command

With the option list-heading you can choose which command prints the heading of the list. If you need a different choice than what's already provided you can use the following command to define a new option:

\DeclareAcroListHeading{ (*name*)} { (*control sequence*) }

Defines a new value $\langle name \rangle$ for the option list-heading. $\langle control \ sequence \rangle$ must be a control sequence which takes one mandatory argument.

As an example here is how the value section is defined:

1 \DeclareAcroListHeading{section}{\section}

14. Configuration Files

Introduced in version 2.2

If you repeatedly have the same setup and definitions for ACRO in your preamble you might want to place those in a configuration file. If ACRO finds a file named acro.cfg present it inputs it at the end of the package. The only thing to be aware of is that this file is input like a package which means that @ is treated as a letterhas (category code 12).

A. All Acronyms Used in this Documentation

- **CD:** Compact Disc
- **CTAN:** Comprehensive TEX Archive Network
- **ECU:** Steuergerät (Electronic Control Unit)
- **ID:** identification string
- JPEG: Joint Photographic Experts Group
- LA: Los Angeles

- **MP:** Member of Parliament
- NATO: North Atlantic Treaty Organization, *deutsch*: Organisation des Nordatlantikvertrags
- NY: New York
- **PDF:** Portable Document Format
- SW: Sammelwerk
- **ST:** Some Test
- **UFO:** unidentified flying object

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