## ACRO

$$
\mathrm{V} 2.2 \mathrm{C} \quad 2016 / 02 / 02
$$

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 $\backslash p r i n t a c r o n y m s$.

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## 1. Licence and Requirements

Permission is granted to copy, distribute and/or modify this software under the terms of the $\mathrm{LAT}_{\mathrm{E}} \mathrm{X}$ 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, I3keys 2 e, ${ }^{2}$ zrefabspage ${ }^{3}$ and translations ${ }^{4}$ [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 [Tho95], acroterm [Vos10], the abbreviations package abbrevs [Swio1] (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, then ${ }^{6}$ ). So Acro stands somewhere in between (but closer to acronym).

The main reason for the existance of ACRO is a question on $\mathrm{T}_{\mathrm{E}} \mathrm{X} \cdot \mathrm{sx}^{7}$ which intrigued me and

[^0]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. ${ }^{6}$

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

Changed in version 1.0

Introduced in version 2.0

Acronyms are created with the command \DeclareAcronym.

## \DeclareAcronym\{ $\langle i d\rangle\}\{\langle$ 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.

$$
\begin{equation*}
\text { short }=\{\langle\text { text }\rangle\} \tag{required}
\end{equation*}
$$

the short form of the acronym. This option is required: an acronym must have a short form. If this is set it must 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.

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

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

```
short-plural = {\langletext }
```

Default: s
the plural ending appended to the short form.

```
short-plural-form={\langletext }
```

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

```
long-plural = {\langletext\rangle} Default: s
```

the plural ending appended to the long form.

```
long-plural-form = {\langletext\rangle}
```

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

```
alt-plural = {\langletext\rangle}
the plural ending appended to the alternative form.

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

Introduced in version 2.0

Introduced in version 1.4

Introduced in version 1.2

Introduced in version 1.2

Introduced in version 1.1

Introduced in version 1.1

Introduced in version 1.2
ntroduced in version 1.3
alt-plural-form \(=\{\langle\) text \(\rangle\}\)
theplural alternative form of the acronym; replaces the alternative form when used instead of appending the plural ending.
list \(=\{\langle\) text \(\rangle\}\)
if specified this will be written in the list as description instead of the long form.
short-indefinite \(=\{\langle\) text \(\rangle\}\)
Default: a
indefinite article for the short form.
long-indefinite \(=\{\langle\) text \(\rangle\}\)
Default: a
indefinite article for the long form.
long-pre \(=\{\langle\) text \(\rangle\}\)
\(\langle\) text \(\rangle\) is prepended to the long form in the text but not in the list of acronyms.
long-post \(=\{\langle\) text \(\rangle\}\)
\(\langle\) text \(\rangle\) is appended to the long form in the text but not in the list of acronyms.
\(a l t=\{\langle\) text \(\rangle\}\)
alternative short form.
alt-indefinite \(=\{\langle\) text \(\rangle\}\)
Default: a
indefinite article for the alternative form.
extra \(=\{\langle\) text \(\rangle\}\)
extra information to be added in the list of acronyms.
```

foreign = {\langleoriginal long form }\rangle

```
can be useful when dealing with acronyms in foreign languages, see section 3.6 on page 10 for details.
sort \(=\{\langle\) text \(\rangle\}\)
if used the acronym will be sorted according to this key instead of its ID.
```

class = {\langletext }\rangle

```
the class the acronym belongs to.
```

cite = {[\langleprenote }][\mp@code{postnote\rangle ]{\langle citation keys\rangle}}

```
a citation that is printed to the acronym according to an option explained later.
```

short-format = {\langleTE}\mp@subsup{T}{E}{}X\mathrm{ code }\rangle

```
the format used for the short form of the acronym.
```

long-format = {\langle T}\mp@subsup{T}{E}{}X\mathrm{ code }\rangle

```
the format used for the long form of the acronym.
```

first-long-format = {\langleTEE X code\rangle}

```
the format used for the first long form of the acronym as set with \ac, \acf or \acflike and their uppercase, plural and indefinite forms.
```

pdfstring = {{\langletext\rangle/\langleplural ending\rangle}}

```
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 = {\langletext\rangle}

```
sets the ActualText key as presented by the accsupp package for the acronym.

Introduced in version 2.1

Introduced in version 1.1

Introduced in version 1.1

Introduced in version 1.1
tooltip \(=\{\langle\) text \(\rangle\}\)
sets the tooltip description for an acronym. For actually getting tooltips you also need an 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 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 on page 15 for details.
index-cmd \(=\{\langle\) control sequence \(\rangle\}\)
This key let's you set an individual index creating command for this acronym. It should be a command that takes one mandatory argument. See section \(4 \cdot 7\) 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.
```

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

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

```
```

6}

```

The short form now looks like this: от.
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.
```

% preamble:
\DeclareAcronym{ny}{
short = NY ,
short-plural = ,
long = New York ,
long-plural = ,
cite = {NewYork}
8 }

```
```

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

```

The first appearance now looks as follows \({ }^{9}\) : New York (NY) [Wik12b].

\subsection*{3.2. Using the Acronyms - the Commands}

Acronyms are used with one of the following commands:
\(\backslash \mathrm{ac} *\{\langle i d\rangle\}\)
basic command; the first output is different from subsequent ones.
\(\backslash A c *\{\langle i d\rangle\}\)
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.

\section*{\acs*\{ \(\langle i d\rangle\}\)}
short form; the actual acronym.
```

\acl*{\langleid\rangle}

```
long form; the meaning of the acronym.
```

\Acl*{\langleid\rangle}

```
    same as \acl but capitalizes first letter.
```

\aca*{\langleid\rangle}

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

\acf*{\langleid\rangle}

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

\section*{\(\backslash A c f *\{\langle i d\rangle\}\)}
same as \acf but capitalizes first letter of the long form.
```

\acp*{\langleid\rangle}
plural form of \ac;

```
\(\backslash\) Acp* \(\{\langle i d\rangle\}\)
    same as \acp but capitalizes first letter of the long form.
\(\backslash \operatorname{acsp} *\{\langle i d\rangle\}\)
    plural form of \(\backslash \mathrm{acs}\);
\(\backslash a c l p *\{\langle i d\rangle\}\)
    plural form of \(\backslash \mathrm{acl}\);
\(\backslash\) Aclp*\{ \(\langle i d\rangle\}\)
    same as \aclp but capitalizes first letter.
```

\acap*{\langleid\rangle}

```
    plural form of \aca;
\(\backslash\) acfp* \(\{\langle i d\rangle\}\)
    plural form of \(\backslash a c f ;\)
\(\backslash A c f p *\{\langle i d\rangle\}\)
    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.

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.
```

% preamble:
% \DeclareAcronym{cd}{
short =cd, first time: Compact Disc (CD)
long = Compact Disc ,
short-format = \scshape
% }
first time: \ac{cd} <br>
s second time: \ac{cd} <br>
short: \acs{cd} <br>
alternative: \aca{cd} <br>
first again: \acf{cd} <br>
long: \acl{cd} <br>
short plural: \acsp{cd} <br>
long plural: \aclp{cd}
second time: CD
short: CD
alternative: CD
first again: Compact Disc (cd)
long: Compact Disc
short plural: CDs
long plural: Compact Discs

```

\subsection*{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 = {\langletext\rangle}

```

Default: s
The plural ending of the short form.
```

long-plural = {\langle text\rangle}

```

Default: s
The plural ending of the long form.

\section*{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:
```

\DeclareAcronym{cd}{
short = cd ,
long = Compact Disc ,
short-format = \scshape
5}
\ \DeclareAcronym{ny}{
short = NY ,
8 short-plural = ,

```
```

long = New York ,
long-plural =
1 }
\DeclareAcronym{sw}{
short = SW ,
long = Sammelwerk ,
long-plural = e
6 }
\DeclareAcronym{MP}{
short = MP ,
long = Member of Parliament ,
long-plural-form = Members of Parliament
1}

```

These acronyms now have the following plural appearances:
```

\acsp{cd}, \aclp{cd} <br> cDs, Compact Discs
\acsp{ny}, \aclp{ny} <br>
\acsp{sw}, \aclp{sw} <br>
\acsp{MP}, \aclp{MP}
NY, New York
SWs, Sammelwerke
MPs, Members of Parliament

```

\subsection*{3.4. Alternative Short Forms}

For some acronyms it might be useful to have alternative forms. For this \DeclareAcronym has another key:
\[
a l t=\{\langle\text { text }\rangle\}
\]

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} <br>
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.

\subsection*{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={\langletext\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.
```

% preamble:
2% \DeclareAcronym{nato}{
3% short = nato ,
4% long = North Atlantic Treaty Organization ,
5% extra = *deutsch*: Organisation des Nordatlantikvertrags ,
6% short-format = \scshape
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}
o headquarters are in Brussels, Belgium, one of the 28 member states

1. across North America and Europe, the newest of which, Albania and
12 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.

\subsection*{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:
```

\ac{ecu}<br>
z \ac{ecu}

```

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

\section*{4. Additional Commands and Possibilities}

\section*{foreign \(=\{\langle\) original long form \(\rangle\}\)}

A description for an acronym originating in another language than the document language.
Here is the definition of the above mentioned ECU acronym:
```

\DeclareAcronym{ecu}{
short = ECU ,
long = Steuerger\"at ,
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:

\section*{\acroenparen\{〈argument \(\rangle\}\)}

Places \(\langle\arg u m e n t\rangle\) in parentheses: \acroenparen\{example\}: (example). See page 20 for a way to customize this other than redefining it.

\section*{4. Additional Commands and Possibilities}

\subsection*{4.1. Indefinite Forms}

Introduced in version 1.2

Unlike many other languages \({ }^{10}\) 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

\subsection*{4.2. Uppercasing}

\section*{\acfirstupper\{〈token list \(\rangle\}\)}

Introduced in version 1.3e

Introduced in version 1.2

This command uppercases the first token in \(\langle\) token list \(\rangle\). The command is less powerful than \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.

\subsection*{4.3. Simulating the First Appearance}

Users told me \({ }^{11}\) 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.
\acflike \(*\{\langle i d\rangle\}\{\langle\) instead of long form \(\rangle\}\)
Write some alternative long form for acronym with ID \(\langle i d\rangle\) as if it were the first time the acronym was used.
```

\acfplike*{\langleid\rangle}{\langleinstead of long form\rangle}

```
    Plural form of \acflike.
```

\acsetup{first-style=footnote}
NYa
\acflike{ny}{the big apple}
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.

\subsection*{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 = {\langletext }\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.

\footnotetext{
11. Well - one, to be precise ;)
}
```

% preamble:
% \DeclareAcronym{la}{
% short = LA ,
% short-plural = ,
% long = Los Angeles ,
% long-plural = ,
% class = city
% }
% \DeclareAcronym{ny}{ Los Angeles (LA)
short = NY , New York (NY)
% short-plural = ,
% long = New York ,
% long-plural = ,
% class = city ,
% cite = NewYork
% }
\acl{la} (\acs{la}) <br>
\acl{ny} (\acs{ny})

```

\subsection*{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:

\section*{\acreset \(\{\langle\) comma separated list of ids \(\rangle\}\)}

Introduced in version 0.5

Introduced in version 1.3e

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.

\section*{\acresetall}

Reset all acronyms.
\acifused \(\{\langle i d\rangle\}\{\langle\) true \(\rangle\}\{\langle\) false \(\rangle\}\)
This command tests if the acronym with id \(\langle i d\rangle\) has already been used and either puts true or false in the input stream.
. \(\backslash\) acreset \(\{n y\} \backslash\) ac \(\{n y\} \quad\) 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:
\acuse\{〈comma separated list of ids〉\}
Introduced in version 0.5

This has the same effect as if an acronym had been used twice, that is, further uses of \ac will

Introduced in version 0.6 a

Introduced in version 0.5
print the short form and the acronym will in any case be printed in the list (as long as its class is not excluded).

\section*{\acuseall}

Mark all acronyms as used.

\section*{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?

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.

\section*{\acpdfstring\{ \(\langle i d\rangle\}\)}

Access the text string used in PDF bookmarks.
```

\acpdfstringplural{\langleid\rangle}

```

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

pdfstring = {{\langlepdfstring\rangle/\langleplural ending\rangle}}

```

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}{
short = pdf ,
long = Portable Document Format ,
format = \scshape ,
pdfstring = PDF ,
accsupp = PDF
7 }

```

\subsection*{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

\section*{4. Additional Commands and Possibilities}

Introduced in version 1.0

Introduced in version 2.1

Introduced in version 2.1

Introduced in version 1.1
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 P DF and paste it into a text file. You should get uppercase letters instead of lowercase ones.
accsupp \(=\{\langle\) text \(\rangle\}\)
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.

\subsection*{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.
```

tooltip = true|false Default: false

```

This options loads the pdfcomment package and sets the command for creating tooltips to \pdftooltip.
tooltip-cmd \(=\{\langle\) control sequence \(\rangle\}\)
Default: \@firstoftwo
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.

\subsection*{4.7. Adding Acronyms to the Index}

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 \(\langle i d\rangle @\langle s h o r t\rangle,\langle s o r t\rangle @\langle s h o r t\rangle\) if the sort key has been set, \(\langle\) index-sort \(\rangle @\langle s h o r t\rangle\) 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.

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.

\section*{5. Printing the List}

Changed in version 1.0
nged in version 1.3

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

\section*{\printacronyms[〈options〉]}

Print the list of acronyms.
The commands takes a few options, namely the following ones:
include-classes \(=\{\langle\) list of classes \(\rangle\}\)
Takes a comma-separated list of the classes of acronyms that should be in the list.
```

exclude-classes = {\langlelist of classes\rangle}

```

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 \(=\underline{\text { true }} \mid\) false \(\quad\) Default: true
Introduced in version 1.3

Set sorting for this list only.
```

1 \acsetup{extra-style=comma}
2 \printacronyms[exclude-classes=city]
3
4 \printacronyms[include-classes=city,name={City Acronyms}]

```

\section*{Acronyms}
cd Compact Disc
ctan Comprehensive \(\mathrm{T}_{\mathrm{E}} \mathrm{X}\) 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

\section*{City Acronyms}

\section*{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 \(\mathrm{IAT}_{\mathrm{E}} \mathrm{X}\) 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.

\section*{6. Options and Customization}

\subsection*{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.
```

messages = silent|loud

Introduced in version 1.6

Introduced in version 2.

Setting messages = \{silent $\}$ will turn all of ACRO's error messages into warnings and all of acro's warnings into info messages. Be sure to check the log file carefully if you decide to set this option.

```
single=\underline{true}|false Default: false
```

If set to true an acronym that's used only once (with \ac) in a document will only print the acronym in a specified form and will not be printed in the list.

```
single-form= long|short|alt|first
Default: long
```

Determines how a single appearance of an acronym is printed if single $=\{$ true $\}$ has been chosen.
hyperref $=\underline{\text { true }} \mid$ false $\quad$ Default: false
If set to true the short forms of the acronyms will be linked to their list entry.

Introduced in version 1.5
label = true|false
Default: false
If set to true this option will place $\backslash l a b e l\{\langle p r e f i x\rangle\langle i d\rangle\}$ the first time the acronym with id $\langle i d\rangle$ is used.
label-prefix $=\{\langle$ text $\rangle\}$
Default: ac:
The prefix for the $\backslash$ label that is placed when option label $=\{$ true $\}$ is used.
Introduced in version 1.5
record-pages = true $\mid$ false
Default: true
Since ACro can handle arabic, roman and Roman page numbers but not any other kind of numbering this option allows to turn the page number recording off for these cases as it would lead to errors else. This affects the whole document and can only be set in the preamble! It means you cannot have page numbers in the list of acronyms in this case. Or rather: you can if you use pages $=\{$ first $\}$.
only-used = true|false Default: true
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 \DeclareAcronym will be written to the list.

```
mark-as-used = first|any
```

Default: any
This option determines wether an acronym is mark as used when the first form is used the first time (with \ac, \acf or \acflike and their uppercase, plural and indefinite forms) or when any of the \ac-like commands is used.
macros $=$ true $\mid$ false Default: false
If set to true this option will create a macro $\backslash\langle i d\rangle$ for each acronym as a shortcut for $\backslash$ ac $\{\langle i d\rangle\}$. Already existing macros will not be overwritten.
xspace $=\underline{\text { true }} \mid$ false
Default: false
If set to true this option will append $\backslash x$ space from the xspace package to the commands created with the macros option.
strict $=$ true|false
Default: false
If set to true and the option macros $=\{$ true $\}$ is in effect then already existing macros will be overwritten.
sort $=$ true $\mid$ false
Default: true
If set to true the acronym list will be sorted automatically. The entries are sorted by their ID ignoring upper and lower case. This option needs the experimental package I3sort (from the l3experimental bundle) and can only be set in the preamble.

## cite = all|first|none

Default: first
This option decides whether citations that are added via cite are added to each first, every or no appearance of an acronym.
cite-cmd $=\{\langle$ control sequence $\rangle\}$ Default: \cite
This option determines which command is used for the citation. Each citation command that takes the cite key as argument is valid, for example biblatex's \footcite.

## cite-connect $=\{\langle$ code $\rangle\}$

Default: \nobreakspace
Depending on the citation command in use a space should be inserted before the citation or maybe not (e.g. \footcite...). This option allows you to set this. Actually it can be used to place arbitrary code right before the citation.
group-citation = true|false Default: false

Introduced in version 2.0

Introduced in version 2.0

Introduced in version 1.1

Introduced in version 1.1

Introduced in version 1.0

Introduced in version 2.1

Introduced in version 2.1

If set to true the short form (or the long form) and the citation of an acronym will be printed together in parentheses when an acronym is used the first time.
group-cite-cmd $=\{\langle$ control sequence $\rangle\}$
Default: \cite
This option determines which command is used for the citation when an acronym is used the first time and group-citation $=$ \{true . Each citation command that takes the cite key as argument is valid, for example biblatex's \footcite.
index = true|false
Default: false
If set to true an index entry will be recorded every time an unstarred acronym command is used for the corresponding acronym.
index-cmd $=\{\langle$ control sequence $\rangle\}$
Default: \index
Chooses the index command that is used when option index has been set to true.
accsupp $=$ true $\mid$ false
Default: false
Activates the access support as provided by the accsupp package.
tooltip = true $\mid$ false
Default: false
Activates tooltip support for ACRO using the pdfcomment package.
tooltip-cmd $=\{\langle$ control sequence $\rangle\}$
Default: \@firstoftwo
A macro taking two mandatory arguments, the first being the short form of the acronym and the second being some tooltip description.
$\mathrm{uc}-\mathrm{cmd}=\{\langle$ control sequence $\rangle\}$
Default: \acfirstupper
The command that is used to capitalize the first word in the $\backslash A c$ and the like commands. You can change it to another one like for example \makefirstuc ${ }^{12}$ or \MakeTextUppercase. ${ }^{13}$

All options of this and the following sections can be set up either as package options or via the setup command:
\acsetup $\{\langle$ options $\rangle\}$
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

### 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 ={\langleformat\rangle}}\quad\mathrm{ (initially empty)
```

Sets a format for all short forms. For example short-format = \{ \scshape\} would print all short forms in small caps.
long-format $=\{\langle$ format $\rangle\} \quad$ (initially empty)
The same for the long forms.

```
foreign-format = {\langleformat }
(initially empty)
```

Introduced in version 1.3

Introduced in version 1.2

Introduced in version 1.1

The format for the foreign entry when it appears as part of the first appearance of an acronym.

```
first-long-format = {\langleformat }
```

The format for the long form on first usage (with \ac, \acf or \acflike and their uppercase, plural and indefinite forms).

```
list-short-format = {\langleformat }
(initially empty)
```

An extra format for the short entries in the list. If not used this is the same as short-format. Please be aware that a call of short-format after this one will overwrite it again.

## list-long-format $=\{\langle$ format $\rangle\}$

(initially empty)
An extra format for the long entries in the list. If not used this is the same as long-format. Please be aware that a call of long-format after this one will overwrite it again.

```
list-foreign-format = {\langleformat\rangle}
```

Default: \acroenparen
The format for the foreign entry as it appears in the list. This may be code that ends with a macro that takes a mandatory argument.
extra-format $=\{\langle$ format $\rangle\} \quad$ (initially empty)
The same for the extra information.

```
first-style = default|plain|empty|square|short|reversed|plain-reversed|footnote|
```

    sidenote
    Default: default
    Changed in version 1.1

The basic style of the first appearance of an acronym. The value sidenote needs the command \sidenote to be defined for example by the sidenotes package.
extra-style = default|plain|comma|paren|bracket Default: default
Defines the way the extra information is printed in the list.

```
plural-ending = {\langletokenlist }
```

Default: s
With this option the default plural ending can be set.

```
% (Keep in mind that we're in
2% a minipage here!)
3 \acsetup{first-style=empty}
\ \acf{ny} \\ NY
5 \acsetup{first-style=footnote} NY'a
\acf{ny} \\ New York [NY] [Wik12b]
7 \acsetup{first-style=square} NY [Wik12b]
\acf{ny} \\ NY (New York) [Wik12b]
\acsetup{first-style=short} New York - NY [Wik12b]
\acsetup{first-style=reversed} NY - New York [Wik12b]
\acf{ny} \\
\ \acsetup{first-style=plain}
\acf{ny} \\
\acsetup{first-style=plain-reversed}
6 \acf{ny}
```


### 6.3. Options Regarding the List

page-ref = none|plain|comma|paren

Default: none
If this option is set to a value other than none the page numbers of the an acronym appeared on are printed in the list. Please note that this is an experimental feature and might fail in quite a number of cases. If you notice anything please send me an email!

```
pages=all|first
```

Default: all

Introduced in version 1.5

If the option page-ref has any value other than none this option determines wether all usages of the acronyms are listed or only the first time. Implicitly sets label $=\{$ true $\}$.

## page-name $=\{\langle$ page name $\rangle\}$

Default: p.\@<br>,
The "name" of the page label. This is automatically translated to the active language. However for the time being there are many translations missing, yet. Please notify me if you find your language missing.
pages - name $=\{\langle$ page name plural $\rangle\}$
Default: pp.\@<br>,

Introduced in version 1.0

Introduced in version 1.3

The "name" of the page label when there are more than one page. This is automatically translated to the active language. However for the time being there are many translations missing, yet. Please notify me if you find your language missing.
following-page = true|false
Default: false
If set to true a page range in the list of acronyms that consists of two pages will be written by the first page and an appended f . This depends on the option next-page.
following-pages = true|false Default: false
Introduced in version 1.3

If set to true a page range in the list of acronyms that set consists of more than two pages will be written by the first page and an appended ff. This depends on the option next-pages.

Introduced in version 1.0

Introduced in version 1.0

Changed in version 2.2

Changed in version 2.0

$$
\text { next }- \text { page }=\{\langle\text { text }\rangle\}
$$

Default：\，f．\＠
Appended to a page number when following－page is set to true and the range is only 2 pages long．This is automatically translated to the active language．However，for the time being there are many translations missing，yet．Please notify me if you find your language missing．

```
next-pages = {\langletext\rangle}
```

Default：\，ff．\＠
Appended to a page number when following－pages is set to true and the range is more than 2 pages long．This is automatically translated to the active language．However，for the time being there are many translations missing，yet．Please notify me if you find your language missing．

```
list-style = description | lof | longtable | extra-longtable | extra-longtable-rev |
    extra-tabular|extra-tabular-rev|tabular|toc Default: description
```

    Choose with which style the list of acronyms should be typeset. If you choose 〈longtable〉,
    extra-longtable or extra-longtable-rev you have to load the longtable [Car14] package in
    your preamble. The values extra-〈something \(\rangle\) put the extra information in a column of it own.
    Be aware that per default all extra-table styles only use l columns. Since acronym descriptions
    can easily get longer that a line you should probably define your own style if you want to use them.
    See section 13 on page 31 for details.
    ```
list-heading = chapter | chapter* | section | section* | subsection | subsection* |
    subsubsection|subsubsection*|addchap|addsec|none Default: section*
```

    The heading type of the list. The last two only work with a KOMA-Script class that also defines
    the appropriate command. A special value is none which suppresses the heading.
    ```
list-name = {\langlelist name\rangle}
Default: Acronyms
```

The name of the list．This is what＇s written in the list－heading．This is automatically translated to the active language．However，for the time being there are many translations missing，yet． Please notify me if you find your language missing．

```
list-caps=true|false
```

Default：false
Print the first letters of the long form capitalized．

## 7．Trailing Tokens and Special Action

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＂ （ $\backslash$ babelhyphen）．

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

## $\backslash A c r o R e g i s t e r T r a i l i n g\langle$ token $\rangle\{\langle$ name $\rangle\}$

This registers the token $\langle$ token $\rangle$ so ACro looks if it follows directly after an acronym macro． $\langle$ name〉 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={\langlecsv list of token names\rangle}
```

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 $=\{\langle\operatorname{csv}$ list of token names $\rangle\}$

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:

```
\aciftrailing{\langlecsv list of token names\rangle}{\langletrue\rangle}{\langle{false\rangle}
```

Check if one of the tokens listed in $\langle c s v$ list of token names $\rangle$ is following and either place $\langle$ true $\rangle$ or $\langle f a l s e\rangle$ 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 equivalent ${ }^{14}$ 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:

[^1]```
. \DeclareAcronym{etc}{
2 short = {\textit{etc}\acdot} ,
long = {\textit{et cetera}} ,
    short-plural = , long-plural =
5}
```

If now you somewhere use

```
1 \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

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

in the preamble.

## 8. About Page Ranges

## 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.

```
\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

 version 2.0The 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：
$\backslash$ NewAcroCommand $\{\langle c s\rangle\}\{\langle$ code $\rangle\}$
Defines a new ACro acronym command $\langle c s\rangle$ ．This sets up the necessary framework needed by acronym commands and defines $\langle c s\rangle$ 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 $\langle i d\rangle$ with \＃1．

## $\backslash$ RenewAcroCommand $\{\langle c s\rangle\}\{\langle$ code $\rangle\}$

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

## \DeclareAcroCommand $\{\langle c s\rangle\}\{\langle$ code $\rangle\}$

Defines a new acro acronym command $\langle c s\rangle$ ．This sets up the necessary framework needed by acronym commands and defines $\langle c s\rangle$ with an optional star argument and a mandatory argument for the acronym id using xparse＇s \DeclareDocumentCommand．Inside 〈code〉 one can refer to the id $\langle i d\rangle$ with \＃1．
$\backslash$ ProvideAcroCommand $\{\langle c s\rangle\}\{\langle$ code $\rangle\}$
Defines a new ACro acronym command $\langle c s\rangle$ ．This sets up the necessary framework needed by acronym commands and defines $\langle c s\rangle$ with an optional star argument and a mandatory argument for the acronym id using xparse＇s \ProvideDocumentCommand．Inside $\langle\operatorname{code}\rangle$ one can refer to the ID $\langle i d\rangle$ with \＃1．

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

## Acronym fetching commands

## \acro＿use：n \｛〈id〉\}

Fetches the acronym using either the first or the short form depending on earlier uses．
\acro＿short：n $\{\langle i d\rangle\}$
Fetches the short form of the acronym．
\acro＿long：n $\{\langle i d\rangle\}$
Fetches the long form of the acronym．
\acro＿alt：$n\{\langle i d\rangle\}$
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 \ExplSyntax0n and \ExplSyntax0ff．

## 11. Defining Own Acronym Macros

## \acro_foreign:n \{ $\langle\langle i\rangle\}$

Fetches the foreign property of the acronym if available.

## \acro_extra:n $\{\langle i d\rangle\}$

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.ob

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 lacro_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 lacro_begin:.

## 11．Defining Own Acronym Macros

## \acro＿check＿and＿mark＿if：nn \｛〈boolean expression $\rangle$ \} \{〈id $\rangle$ \}

Checks if the acronym with the ID $\langle i d\rangle$ exists and marks it as used when $\langle$ boolean $\rangle$ expression evaluates to true．This macro is used inside \NewAcroCommand and friends implicitly．
\acro＿check＿acronym：nn $\{\langle i d\rangle\}\{$ true｜false\}
Checks if the acronym with the ID $\langle i d\rangle$ 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．
\acro＿mark＿as＿used：n $\{\langle i d\rangle\}$
Explicitly use the acronym with the id $\langle i d\rangle$ ．This is the expl3 macro applied to all entries in \acuse．
＊\acro＿if＿acronym＿used：nTF \｛ $\langle i d\rangle\}\{\langle$ true $\rangle\}\{\langle$ false $\rangle\}$
The code－level version of \acifused．This macro is expandable．
\acro＿for＿all＿acronyms＿do：n \｛〈code〉\}
Loops over all acronyms known when the macro is used．Inside of $\langle c o d e\rangle$ you can refer to the ID $\langle i d\rangle$ 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 $\backslash \mathrm{ac}$ would be

```
\NewDocumentCommand \ac {sm}
    {
        \acro_begin:
            \acro_reset_specials:
            \acro_check_and_mark_if:nn {#1} {#2}
            \acro_use:n {#2}
        \acro_end:
    }
```

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

```
\NewAcroCommand \Ac
    {
        \acro_first_upper:
        \acro_use:n {#1}
    }
\NewAcroCommand \iac
    {
        \acro_indefinite:
        \acro_use:n {#l}
    }
\NewAcroCommand \acp
    {
        \acro_plural:
        \acro_use:n {#1}
    }
\NewAcroCommand \Acp
    {
        \acro_plural:
        \acro_first_upper:
        \acro_use:n {#1}
    }
\NewAcroCommand \Aclp
    {
        \acro_plural:
        \acro_first_upper:
        \acro_long:n {#1}
    }
```


## 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:

## \ProvideAcroEnding\｛〈name〉\}\{〈short default $\rangle\}\{\langle$ long default $\rangle\}$

This macro defines the options
－ name $\rangle$－ending，

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

It also defines the acronym properties

- short－〈name $\rangle$ ，
- short－〈name $\rangle$－form，
- alt－〈name〉，
- alt－〈name〉－form，
－long－$\langle$ name $\rangle$ and
－long－〈name $\rangle$－form．
Additionally it defines a setup macro as described in section 11 on page 26，\acro＿$\langle$ name $\rangle$ ：．If $\langle n a m e\rangle$ contains a－（dash）it is replaced by＿before \acro＿$\langle$ name $\rangle$ ：is built．So if you choose my－name the corresponding macro is named \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 \ExplSyntax0n
% this now only works because I've use the same already in the preamble so
% it does nothing here:
\ProvideAcroEnding {possessive} {'s} {'s}
\ProvideAcroCommand \acg
    {
        \acro_possessive:
        \acro_use:n {#1}
    }
\ExplSyntax0ff
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

```
. \NewAcroCommand \acgp
    {
        \acro_possessive:
        \acro_plural:
        \acro_use:n {#1}
    }
```

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

```
\ProvideAcroEnding {possessive-singular} {'s} {'s}
\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 $\left[\mathrm{L}_{3} \mathrm{P}\right]$ ). 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\{ $\langle$ name $\rangle\}\{\langle$ template $\rangle\}\{\langle$ options $\rangle\}$
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 . $\langle o p t i o n s\rangle$ 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 ${ }^{\mathrm{A}} \mathrm{T}_{\mathrm{E}} \mathrm{X}$ list where items are listed with - . In those lists short entries will always be fed as optional argument to
- :
- \langle\) long \(\rangle\langle\) extra \(\rangle\langle\) page \(\rangle\)

- 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:
$\langle$ short $\rangle \&\langle l o n g\rangle\langle$ extra $\rangle\langle$ page $\rangle \backslash t a b u l a r n e w l i n e$
- The template extra-table typesets the list in a table with four columns: $\langle$ short $\rangle \&\langle l o n g\rangle \&\langle e x t r a\rangle \&\langle p a g e\rangle \backslash t a b u l a r n e w l i n e$

Table 1: Available List Templates and Their Options

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

- 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}{
    table = longtabu ,
    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]:

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

This would look as follows:

## Acronyms

CD: Compact Disc
ctan: Comprehensive $\mathrm{TE}_{\mathrm{E}}$ 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

### 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:
$\backslash$ DeclareAcroListHeading $\{\langle$ name $\rangle\}\{\langle$ control sequence $\rangle\}$
Defines a new value $\langle n a m e\rangle$ for the option list-heading. 〈control sequence〉 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

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

## B. References

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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## B. References

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