

ACRO

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Typeset Acronyms and other Abbreviations

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ACRO allows you to define and manage acronyms and abbreviations. It can also be used for glossaries or nomenclatures.

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Part I.

Get started with **ACRO**

1. Licence and requirements

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

2. Glossary

articles Articles are prefixes to acronyms, usually separated with a blank. *Different types of articles are mutually exclusive.*

endings Endings are postfixes to acronyms, usually not separated from the acronym. *Different types of endings are mutually exclusive.*

load-time option A load-time option is a package option of **ACRO** which *must* be set as option to `\usepackage[<options>]{acro}`.

option An option is a package option of **ACRO** which must set with `\acsetup`. It *cannot* be set as option to `\usepackage`. Options usually also can be set in the optional argument of `\ac` and friends.

property A property is an option to the second argument of the `\DeclareAcronym` command. They are options of an individual acronym if you will.

template A template determines how different objects of **ACRO** are printed. This includes the acronyms themselves but also for example the list of acronyms as a whole.

translations Localisation strings which can be modified.

3. **ACRO** for the impatient

Acronyms are defined in the preamble via the command

```
\DeclareAcronym{<id>}{<properties>}
```

where *<id>* is a unique string to identify the acronym and *<properties>* is a key/value list of acronym properties. These include:

short = {<text>} (required)

The short form of the acronym. *This property is required:* an acronym must have a short form.

long = {<text>} (required)

The long form of the acronym. *This property is required:* an acronym must have a description.



In its simplest form an acronym needs a short and a long form. Please note that both properties *must* be set.

In the document acronyms are used with these commands:

`\ac{⟨id⟩}` `\Ac{⟨id⟩}`

`\ac` prints the acronym `⟨id⟩`, the first time with full description and every subsequent use only the abbreviated form. `\Ac` does the same but uppercases the first letter – this may be needed at the beginning of a sentence.

`\acs{⟨id⟩}` `\Acs{⟨id⟩}`

`\acs` prints the short form of the acronym `⟨id⟩`. `\Acs` does the same but uppercases the first letter.

`\acl{⟨id⟩}` `\Acl{⟨id⟩}`

`\acl` prints the long form of the acronym `⟨id⟩`. `\Acl` does the same but uppercases the first letter.

`\acf{⟨id⟩}` `\Acf{⟨id⟩}`

`\acf` prints the full form of the acronym `⟨id⟩`. `\Acf` does the same but uppercases the first letter.

Let's say you defined CD as follows:

```
1 \DeclareAcronym{cd}{
2   short = CD ,
3   long  = compact disc
4 }
```

Then the usage is

1 \begin{tabular}{ll}	
2 first & \ac{cd} \\\	first compact disc (CD)
3 second & \ac{cd} \\\	second CD
4 long & \acl{cd} \\\	long compact disc
5 short & \acs{cd} \\\	short CD
6 full & \acf{cd}	full compact disc (CD)
7 \end{tabular}	

4. Setting options

4.1. Load-time options

`ACRO` knows only a small set of load-time options which can be used as argument to `\usepackage`:

4. Setting options

`version = 2|3`

Initial: 3

The option allows you to use the last version prior to the update to version 3. This may help if you don't have the time to fix issues after upgrading to the new version.

`upgrade = true|false`

Initial: true

When this option is used **ACRO** tries to give as much helpful and meaningful warning or error messages when a deprecated or removed command, property, or option is used. This is especially useful if you are upgrading from version 2. The option will initially be true for a few months after the upgrade to version 3.

4.2. Setup command

All options of **ACRO** that have *not* been mentioned in section 4.1 have to be set up either with this command

`\acsetup{<options>}`

or as option to other commands. If the latter is possible then it is described when the corresponding commands are explained. Options usually follow a key/value syntax and are always described in the following way:

option

An option without a value. Those options are very rare if there are any.

`option = {<value>}`

Initial: preset

An option where a value can be given. The pre-set value is given to the right.

`option = choiceA|choiceB|choiceC`

Initial: choiceB

An option with a determined set of choices. The underlined value is chosen if the option is given without value.

`option = true|false`

A boolean option with only the choices true and false.

module/option

An option at a deeper level belonging to the module **module**.

All of the above is probably clear from an example (using real options):

```
1 \acsetup{
2   make-links = true , % boolean
3   index ,          % boolean
4   format = \emph ,  % standard
5   list / local ,    % boolean option of the list module
6   list/display = all % choice option of the list module
7 }
```

Part II.

Comprehensive description of creation and usage of acronyms

5. Declaring acronyms and other abbreviations

All acronyms have to be declared in the preamble with the following command in order to be used in the document. Any usage of an acronym which has not been declared leads to an error message.

`\DeclareAcronym{<id>}{<list of properties>}`

The basic command for declaring an acronym where `<id>` is a unique string identifying the acronym. Per default this is case sensitive which means `id` is different from `ID`, for example.

The command understands a number of properties which are listed in the following sections. This is a comprehensive overview over the existing properties. Many properties are also explained in more detail in later sections of this manual.

`case-sensitive = true|false`

Initial: false

When this is set you can write the `ID` of the acronym upper- or lower- or mixed case and it is recognized by `ACRO` as the same. This might be useful when the acronym appears in the page header, for example.



In its simplest form an acronym needs a short and a long form. Please note that both properties *must* be set.

5.1. Basic properties

`short = {<text>}`

(required)

The short form of the acronym. *This property is required:* an acronym must have a short form.

Maybe you mostly have simple acronyms where the `ID` and short form are the same. In that case you can use

`use-id-as-short = true|false`

Initial: false

to use the `ID` of the acronym as short form. For more complicated cases this would still allow you to set the short form.

`long = {<text>}`

(required)

The long form of the acronym. *This property is required:* an acronym must have a description.

`alt = {<text>}`

(initially empty)

Alternative short form.

5. Declaring acronyms and other abbreviations

extra = {*<text>*} (initially empty)

Extra information to be added in the list of acronyms.

foreign = {*<long form in foreign language>*} (initially empty)

Can be useful when dealing with acronyms in foreign languages, see section 14 on page 22 for details.

long-post = {*<text>*} (initially empty)

<text> is appended to the long form of the acronym in the text but not in the list of acronyms.

post = {*<text>*} (initially empty)

<text> is appended to the acronym in the text but not in the list of acronyms.

single = {*<text>*} if unused then equal to **long**

If provided *<text>* will be used instead of the long form if the acronym is only used a single time and the option **single** has been set, see section 9 on page 13.

sort = {*<text>*} if unused then equal to **short**

If used the acronym will be sorted according to this property instead of its ID.

tag = {*<csv list>*} (initially empty)

The tag(s) of an acronym.

cite = [*<prenote>*][*<postnote>*]{*<citation keys>*} (initially empty)

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

before-citation = {*<text>*} (initially empty)

<text> is prepended to the citation of the acronym when and where the citation is printed.

index = {*<text>*} (initially empty)

This property allows to overwrite the automatic index entry with an arbitrary one. See section 16.2 on page 26 for details.

index-sort = {*<text>*} if unused then equal to **sort**

If you use the option **index** every occurrence of an acronym is recorded to the index and sorted by its short form or (if set) by the value of the **sort** property. This property allows to set an individual sorting option for the index. See section 16.2 on page 26 for details.

5.2. Properties related to plural and indefinite forms

short-plural = {*<text>*} Initial: s

The plural ending appended to the short form.

short-plural-form = {*<text>*} (initially empty)

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

long-plural = {*<text>*} Initial: s

The plural ending appended to the long form.

5. Declaring acronyms and other abbreviations

`long-plural-form` = {`<text>`} (initially empty)
Plural long form of the acronym; replaces the long form when used instead of appending the plural ending.

`alt-plural` = {`<text>`} Initial: s
The plural ending appended to the alternative form.

`alt-plural-form` = {`<text>`} (initially empty)
The plural alternative form of the acronym; replaces the alternative form when used instead of appending the plural ending.

`foreign-plural` = {`<text>`} Initial: s
The plural ending appended to the foreign form.

`foreign-plural-form` = {`<text>`} (initially empty)
Plural foreign form of the acronym; replaces the foreign form when used instead of appending the plural ending.

`short-indefinite` = {`<text>`} Initial: a
Indefinite article for the short form.

`long-indefinite` = {`<text>`} Initial: a
Indefinite article for the long form.

`alt-indefinite` = {`<text>`} Initial: a
Indefinite article for the alternative form.

5.3. Properties related to formatting

`format` = {`<code>`} (initially empty)
The format used for both short and long form of the acronym.

`short-format` = {`<code>`} if unused then equal to `format`
The format used for the short form of the acronym.

`long-format` = {`<code>`} if unused then equal to `format`
The format used for the long form of the acronym.

`first-long-format` = {`<code>`} if unused then equal to `long-format`
The format used for the first appearance of the long form of the acronym.

`alt-format` = {`<code>`} if unused then equal to `short-format`
The format used for the alternative form of the acronym. If this is not given the short format will be used.

`extra-format` = {`<code>`} (initially empty)
The format used for the additional information of the acronym.

5. Declaring acronyms and other abbreviations

`foreign-format = {\code}` (initially empty)
The format used for the foreign form of the acronym.

`single-format = {\code}` if unused then equal to `long-format`
The format used for the acronym if the acronym is only used a single time.

`list-format = {\code}` if unused then equal to `long-format`
The format used for the long form of the acronym in the list if the list template supports it. All pre-defined list templates *do* support it.

`first-style = long-short|short-long|short|long|footnote` (initially empty)
The style of the first appearance of the acronym, see also section 8 on page 12.

`single-style = long-short|short-long|short|long|footnote` (initially empty)
The style of a single appearance of the acronym, see also section 9 on page 13.

5.4. Properties related to the created PDF file

`pdfstring = {\pdfstring}` if unused then equal to `short`
Used as PDF string replacement in bookmarks when used together with the hyperref [ORT20] or the bookmark package [Obe19].

`pdfcomment = {\text}`
Sets a tooltip description for an acronym. For actually getting tooltips you also need an appropriate setting of the options `pdfcomment/cmd` and `pdfcomment/use`, see also section 20.3 on page 31.

`short-acc = {\text}` if unused then equal to `short`
Sets the ActualText property as presented by the accsupp package for the short form of the acronym.

`long-acc = {\text}` if unused then equal to `long`
Sets the ActualText property as presented by the accsupp package for the long form of the acronym.

`alt-acc = {\text}` if unused then equal to `alt`
Sets the ActualText property as presented by the accsupp package for the alternative short form of the acronym.

`foreign-acc = {\text}` if unused then equal to `foreign`
Sets the ActualText property as presented by the accsupp package for the foreign form of the acronym.

`extra-acc = {\text}` if unused then equal to `extra`
Sets the ActualText property as presented by the accsupp package for the extra information of the acronym.

6. Using acronyms

`single-acc = {⟨text⟩}` if unused then equal to `long-acc`
Sets the ActualText property as presented by the accsupp package for a single appearance of the acronym.

`list-acc = {⟨text⟩}` if unused then equal to `list`
Sets the ActualText property as presented by the accsupp package for the appearance in the list of acronyms.

5.5. Further properties

`list = {⟨text⟩}` if unused then equal to `long`
If specified this will be written in the list as description instead of the long form if the corresponding list template supports it.

`foreign-babel = {⟨language⟩}` (initially empty)
The babel [Bra19] or polyglossia [Cha19] language of the foreign form. This language is used to wrap the entry with `\foreignlanguage{⟨language⟩}` if either babel or polyglossia is loaded. You'll need to take care that the corresponding language is loaded by babel or polyglossia.

`foreign-locale = {⟨language⟩}` (initially empty)
The language name that is output when the option `locale/display` is used. If this property is not set then the appropriate value might be derived from `foreign-babel`. See section 14 on page 22 for details.

6. Using acronyms

There are a number of commands to use acronyms with. Their names always follow the same pattern which should make their usage intuitive immediately.

All of these commands have a starred form which means “don't count this as usage”. All of these commands also have an optional argument that allows to set options for that usage only.

`\acrocommand*[⟨options⟩]{⟨id⟩}`

This is the general syntax of all of the commands listed below. The star and the optional argument is left way for the sake of readability. A command `\acrocommand` does not actually exist.

`\ac{⟨id⟩}` `\Ac{⟨id⟩}` `\acp{⟨id⟩}` `\Acp{⟨id⟩}` `\iac{⟨id⟩}` `\Iac{⟨id⟩}`

`\ac` prints the acronym `⟨id⟩`, the first time with full description and every subsequent use only the abbreviated form. `\Ac` does the same but uppercases the first letter – this may be needed at the beginning of a sentence. The commands `\acp` and `\Acp`, resp., print the corresponding plural forms. The commands `\iac` and `\Iac`, resp., print indefinite forms.

`\acs{⟨id⟩}` `\Acs{⟨id⟩}` `\acsp{⟨id⟩}` `\Acsp{⟨id⟩}` `\iacs{⟨id⟩}` `\Iacs{⟨id⟩}`

`\acs` prints the short form of the acronym `⟨id⟩`. `\Acs` does the same but uppercases the first letter. The commands `\acsp` and `\Acsp`, resp., print the corresponding plural forms. The commands `\iacs` and `\Iacs`, resp., print indefinite forms.

6. Using acronyms

`\acl{<id>}` `\Acl{<id>}` `\aclp{<id>}` `\Aclp{<id>}` `\iacl{<id>}` `\Iacl{<id>}`

`\acl` prints the long form of the acronym `<id>`. `\Acl` does the same but uppercases the first letter. The commands `\aclp` and `\Aclp`, resp., print the corresponding plural forms. The commands `\iacl` and `\Iacl`, resp., print indefinite forms.

`\aca{<id>}` `\Aca{<id>}` `\acap{<id>}` `\Acap{<id>}` `\iaca{<id>}` `\Iaca{<id>}`

`\aca` prints the alternative short form of the acronym `<id>`. `\Aca` does the same but uppercases the first letter. The commands `\acap` and `\Acap`, resp., print the corresponding plural forms. The commands `\iaca` and `\Iaca`, resp., print indefinite forms.

`\acf{<id>}` `\Acf{<id>}` `\acfp{<id>}` `\Acfp{<id>}` `\iacf{<id>}` `\Iacf{<id>}`

`\acf` prints the full form of the acronym `<id>`. `\Acf` does the same but uppercases the first letter. The commands `\acfp` and `\Acfp`, resp., print the corresponding plural forms. The commands `\iacf` and `\Iacf`, resp., print indefinite forms.

The usage should be clear. Let's assume you have defined an acronym UFO like this:

```
1 \DeclareAcronym{ufo}{
2   short = UFO ,
3   long = unidentified flying object ,
4   foreign = unbekanntes Flugobjekt ,
5   foreign-plural-form = unbekannte Flugobjekte ,
6   foreign-babel = ngerman ,
7   long-indefinite = an
8 }
```

Then typical outputs look like this:

```
1 \ac{ufo} \\
2 \iac{ufo} \\
3 \iacl{ufo} \\
4 \Iacf{ufo} \\
5 \acfp{ufo}
```

unidentified flying object (unbekanntes Flugobjekt, UFO)
a UFO
a unidentified flying object
unidentified flying object (unbekanntes Flugobjekt, UFO)
unidentified flying objects (unbekannte Flugobjekte, UFOs)



In a number of contexts all acronym commands act as if their starred form is used: in the table of contents, in the list of figures, and in the list of tables. The same is true for floats and the measuring phase of common table environments like `tabularx` or `ltxtable`.

7. Alternative short forms

Sometimes expressions have two different short forms. An example might be JPEG which also often is JPG. This is what the property `alt` is there for.

`alt = {\text{}}`

Alternative short form.

Let's define JPEG:

```
1 \DeclareAcronym{jpg}{
2   short = JPEG ,
3   sort  = jpeg ,
4   alt   = JPG ,
5   long  = Joint Photographic Experts Group
6 }
```

And let's see how to use it:

```
1 \ac{jpg} \
2 \ac{jpg} \
3 \aca{jpg}
```

Joint Photographic Experts Group (JPEG or JPG)
 JPEG
 JPG

As you can see the full form shows both short forms of the acronym. This could be changed by altering the template for the full form, see section 23 on page 35 and section 8. The alternative form is also printed in the list of acronyms, see section A on page 54. This can also be changed by altering the template for the list, again see section 23.

8. The first or full appearance

If an acronym is used for the first time with `\ac` (after any number of usages with the starred forms of the usage commands listed in section 6 on page 10) or if an acronym is used `\acf`, then the first or full appearance of the acronym is printed.¹

The first or full appearance of an acronym is determined by this option:

`first-style = long-short|short-long|short|long|footnote` Initial: long-short

The style of the first appearance of the acronym. This option sets the appearance for all acronyms. Available options in reality are the names of all defined templates of the type acronym. All pre-defined templates can be found in section 23.1 on page 35.

¹. This usually requires at least two \LaTeX runs until it is stable.

9. Single appearances of an acronym

It might be desirable to set the first appearance of an acronym individually. This is possible by setting the corresponding property:

`first-style = long-short|short-long|short|long|footnote` (initially empty)

The style of the first appearance of the acronym.

Let's again look at an example:

```
1 \acf[first-style=long-short]{cd} \l  compact disc (CD)
2 \acf[first-style=short-long]{cd} \l  CD (compact disc)
3 \acf[first-style=footnote]{cd} \l  CDa
4 \acf[first-style=long]{cd} \l  compact disc
5 \acf[first-style=short]{cd} \l  CD
```

a. compact disc

This also demonstrates the use of the optional argument.

An example of an abbreviation that should have long as first appearance might be “etc.”, defined like this

```
1 \DeclareAcronym{etc}{
2   short = etc\acdot ,
3   long = et cetera ,
4   format = \textit ,
5   first-style = long ,
6   plural =
7 }
```

and output like this:

```
1 \ac{etc}, \ac{etc} \ac{etc}.          et cetera, etc. etc.
```

The command `\acdot` is explained in section 18 on page 28. Basically it checks if a dot follows and outputs a dot if not.

9. Single appearances of an acronym

If an acronym is used only once (not counting usages with the starred forms of the usage commands listed in section 6 on page 10), then the single appearance of the acronym is printed.²

The single appearance of an acronym is determined by this option:

`single = true|false|⟨number⟩` Initial: false

This option determines whether a single appearance of an acronym counts as *usage*. It might be

2. This usually requires at least two \LaTeX runs until it is stable.

10. Printing the list

desirable in such cases that an acronym is simply printed as long form and not added to the list of acronym. This is what this option does. With $\langle number \rangle$ the minimal number of usages can be given that needs to be exceeded. `single = {1}` is the same as `single = {true}`.

`single-style = long-short|short-long|short|long|footnote` Initial: long

The style of the single appearance of an acronym. Can be used to determine how a single appearance is printed if the option `single` has been set. This option sets the appearance for all acronyms. Available options in reality are the names of all defined templates of the type acronym. All pre-defined templates can be found in section 23.1 on page 35.

If you like you can also set the single appearance of an acronym individually:

`single = { $\langle text \rangle$ }` if unused then equal to `long`

If provided $\langle text \rangle$ will be used instead of the long form if the acronym is only used a single time and the option `single` has been set.

`single-format = { $\langle code \rangle$ }` if unused then equal to `long-format`

The format used for the acronym if the acronym is only used a single time.

`single-style = long-short|short-long|short|long|footnote` (initially empty)

The style of the single appearance of the acronym.

Let's again look at an example. The acronym PNG is defined as follows:

```
1 \DeclareAcronym{png}{
2   short = PNG ,
3   long  = Portable Network Graphics ,
4   first-style = short-long ,
5   single-style = short
6 }
```

And it is used only once in this manual³:

```
1 \ac{png} PNG
```

Please be aware that `\acf` would still print the full form, of course.

10. Printing the list

10.1. The main command and its options

The main idea is simple: just place

3. You will find it in the list of acronyms in section A nonetheless as this document does `list/display = {all}`.

10. Printing the list

`\printacronyms[<options>]`

where you want the list to appear. It may require several (most times two) \LaTeX runs for it to stabilize so look out for any warnings from `ACRO` requiring to re-run.

The options controlling the list are these:

`list/template` = `description|table|longtable|lof|toc` Initial: `description`
Choose the template to create the list with. See more on this in sections 23 on page 35 and A on page 50.

`list/sort` = `true|false` Initial: `true`
Decide whether to sort the list of acronyms alphabetically or to print it in order of definition.

`list/display` = `all|used` Initial: `used`
Decide whether to print only the acronyms actually used in the document or all acronyms which have been declared in the preamble.

`list/exclude` = `{<csv list of tags>}` (initially empty)
Set a list of tags to exclude from the list. Only acronyms not belonging to one of these tags will be included.

`list/include` = `{<csv list of tags>}` (initially empty)
Set a list of tags to include in the list. Only acronyms belonging to one of these tags will be included.

`list/heading` = `none|section|section*|chapter|chapter*`
Choose the heading template for the list of acronyms.
This only has an effect if the list template supports it. All pre-defined templates *do* support it.

`list/name` = `{<text>}` Initial: `\acrotranslate{list-name}`
Overwrites the text which is used in the heading.
This only has an effect if the list template supports heading templates *and* the heading templates support it. All pre-defined heading templates *do* support this.

`list/preamble` = `{<text>}` (initially empty)
Set a preamble to be placed between heading and actual list.
This only has an effect if the list template supports it. All pre-defined templates *do* support it.

`list/locale/display` = `true|false` Initial: `false`
This option determines whether the language of the foreign form is printed or not.
This only has an effect if the list template supports foreign forms. All pre-defined templates *do* support them.

All these options can be set with `\acsetup` globally or locally as options to `\printacronyms`. In the latter case omit the leading `list`:

```

1 \acsetup{list/display=all,list/exclude=units}
2 or
3 \printacronyms[display=all,exclude=units]

```

10.2. Add page numbers to the list

If you want to include the page numbers where the acronyms have been used in the list of acronym you can use these options:

`pages/display = first|all|none` Initial: none

Decide whether to include page numbers in the list of acronyms and whether to add the first page or every page. When you choose `first` and have `hyperref` loaded you will also get a backlink to that page.

`pages/seq/use = true|false` Initial: true

Turns a two-page range into $\langle num \rangle$ f. (*sequens*) and a three-page range into $\langle num \rangle$ ff. (*sequentes*) when set to true.

`pages/seq/pre = { $\langle code \rangle$ }` Initial: \,
 $\langle code \rangle$ is inserted between the page number and the *sequens* or *sequentes* symbol.

`pages/seq/threshold = { $\langle num \rangle$ }` Initial: 3

The threshold for a page range to be turned into *sequentes*. A page range above the threshold is still typeset as a range: $\langle num1 \rangle - \langle num2 \rangle$.

`pages/fill = { $\langle code \rangle$ }` Initial: \dotfill

This is the code that is placed between acronym description and actual page numbers.

`pages/name = true|false` Initial: false

If set to true the page numbers are preceded with p. or pp.

10.3. Filter lists using tags

With the property `tag` you can assign one or more tags to an acronym. These tags can be used to filter the list of acronyms.

`tag = { $\langle csv list \rangle$ }` (initially empty)

The tag(s) of an acronym.

`list/exclude = { $\langle csv list of tags \rangle$ }` (initially empty)

Set a list of tags to exclude from the list. Only acronyms not belonging to one of these tags will be included.

`list/include = { $\langle csv list of tags \rangle$ }` (initially empty)

Set a list of tags to include in the list. Only acronyms belonging to one of these tags will be included.

10. Printing the list

Let's look at an example. This manual declares these two acronyms with the tag `city`:

```
1 \DeclareAcronym{la}{
2   short = LA ,
3   long = Los Angeles,
4   plural = ,
5   tag = city
6 }
7 \DeclareAcronym{ny}{
8   short = NY ,
9   long = New York ,
10  plural = ,
11  tag = city
12 }
```

We can now use this to either print a list *without* these acronyms by saying

```
1 \printacronyms[exclude=city]
```

or print a list *with only* these acronyms with

```
1 \printacronyms[include=city,heading=none]
```

LA Los Angeles
NY New York25

If you use both `exclude` and `include` and list a tag in both `exclude` takes precedence over `include`.



```
1 \printacronyms[exclude={a,b},include={b,c}]
```

would only print acronyms with tag `c`.

10.4. Local lists

Maybe you like a list of acronyms for each chapter in a book which only lists the acronyms used within this chapter. You need to do three things: set

`barriers/use = true|false`

Initial: `false`

this option to `true`, place

`\acbarrier`

before a new chapter starts (this is not necessary for the first chapter), and use `\printacronyms` with the option

`list/local = true|false`

Initial: false

or set this option once in the preamble with `\acsetup` so it is applied to every list.

Please read more on barriers in section 17 on page 27.



Please don't use page numbers together with local lists for the time being. If an acronym appears in more than one list both lists would contain the *same* page numbers instead of only the ones local to barriers.

For the similar reasons please also don't use `make-links` together with local lists. This *might* be resolved on day.

11. Formatting

ACRO has a number of options and parameters which can be used to influence the formatting of acronyms.

`format = {\code}`

(initially empty)

Sets the format for both the short and the long form.

`format/short = {\code}`

(initially empty)

Sets the format for the short form.

`format/long = {\code}`

(initially empty)

Sets the format for the long form.

`format/first-long = {\code}`

(initially empty)

Sets the format for the first appearance of the long form.

`format/alt = {\code}`

(initially empty)

Sets the format for the alternative form.

`format/extra = {\code}`

(initially empty)

Sets the format for the extra information.

`format/foreign = {\code}`

(initially empty)

Sets the format for the foreign form.

`format/list = {\code}`

(initially empty)

Sets the format for the long form in the list form.

While this options influence the formatting of the acronyms globally you can also give each acronym its own formatting individually:

11. Formatting

`format = {\code}` (initially empty)

The format used for both short and long form of the acronym.

`short-format = {\code}` if unused then equal to `format`

The format used for the short form of the acronym.

`long-format = {\code}` if unused then equal to `format`

The format used for the long form of the acronym.

`first-long-format = {\code}` if unused then equal to `long-format`

The format used for the first appearance of the long form of the acronym.

`alt-format = {\code}` if unused then equal to `short-format`

The format used for the alternative form of the acronym. If this is not given the short format will be used.

`extra-format = {\code}` (initially empty)

The format used for the additional information of the acronym.

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

The format used for the foreign form of the acronym.

`single-format = {\code}` if unused then equal to `long-format`

The format used for the acronym if the acronym is only used a single time.

`list-format = {\code}` if unused then equal to `long-format`

The format used for the long form of the acronym in the list if the list template supports it. All pre-defined list templates *do* support it.

`first-style = long-short|short-long|short|long|footnote` (initially empty)

The style of the first appearance of the acronym, see also section 8 on page 12.

`single-style = long-short|short-long|short|long|footnote` (initially empty)

The style of a single appearance of the acronym, see also section 9 on page 13.

Per default the individual formatting instructions are *additive* to the global ones. This can be changed through the option

`format/replace = true|false` Initial: false

With this option active local options will *replace* the global ones.

Let's see an example:

```
1 \DeclareAcronym{pdf}{
2   short = pdf ,
3   long = Portable Document Format ,
4   short-format = \scshape
5 }
```

```

1 \acsetup{format = \itshape}
2 \acf{pdf} \par
3 \acsetup{format/replace=true}
4 \acf{pdf}

```

Portable Document Format (PDF)

Portable Document Format (PDF)

12. Plural forms and other endings

12.1. The plural ending and the plural form

Not in all languages plural forms are as easy as always appending an “s”. Not even English. Sometimes there’s other endings instead.⁴ This is why **ACRO** has quite a number of different properties related to plural forms or endings:

short-plural = { $\langle text \rangle$ } Initial: s

The plural ending appended to the short form.

short-plural-form = { $\langle text \rangle$ } (initially empty)

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

long-plural = { $\langle text \rangle$ } Initial: s

The plural ending appended to the long form.

long-plural-form = { $\langle text \rangle$ } (initially empty)

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

alt-plural = { $\langle text \rangle$ } Initial: s

The plural ending appended to the alternative form.

alt-plural-form = { $\langle text \rangle$ } (initially empty)

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

foreign-plural = { $\langle text \rangle$ } Initial: s

The plural ending appended to the foreign form.

foreign-plural-form = { $\langle text \rangle$ } (initially empty)

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

4. German is full of such examples.

There are two options which allow to change the default values for the whole document:

`short-plural-ending = {⟨text⟩}` Initial: s

Defines the plural ending for the short forms to be ⟨text⟩.

`long-plural-ending = {⟨text⟩}` Initial: s

Defines the plural ending for the long forms to be ⟨text⟩.

Now let's see two simple examples demonstrating the two different kinds of plural settings:

```

1 \DeclareAcronym{sw}{
2   short = SW ,
3   long = Sammelwerk ,
4   long-plural = e
5 }
6 \DeclareAcronym{MP}{
7   short = MP ,
8   long = Member of Parliament ,
9   plural-form = Members of Parliament
10 }
```

The first one has another plural ending than the usual “s”. The second one has a different plural form altogether because appending an “s” would give a wrong form:

1 \acfp{sw} \par	Sammelwerke (SWs)
2 \acfp{MP}	Members of Parliament (MPs)

12.2. Other endings

Besides plural endings there are other ones like the genitive case, for example. This is why **ACRO** generalized the concept. Section 24 on page 43 explains in detail how to define and use additional endings.

13. Articles

13.1. Indefinite forms

Indefinite forms can be a problem if the short and the long form of acronyms have different indefinite articles.⁵

5. This may very well be a language specific issue.

<pre> 1 \acreset{ufo}% 2 a \ac{ufo} \par 3 an \ac{ufo} </pre>	a unidentified flying object (unbekanntes Flugobjekt, UFO) an UFO
---	---

And what good would it be to use a package like **ACRO** if you have to keep track of first and second uses, anyway? This is why UFO should be defined like we did on page 11. We then can just use the dedicated commands and let them decide for us:

<pre> 1 \acreset{ufo}% 2 \iac{ufo} \par 3 \iac{ufo} </pre>	an unidentified flying object (unbekanntes Flugobjekt, UFO) a UFO
--	---

The commands which also output the indefinite article all start with an “i” and have all been described in section 6 on page 10 already: `\iac`, `\Iac`, `\iacs`, `\Iacs`, `\iacI`, `\IacI`, `\iaca`, `\Iaca`, `\iacf`, and `\Iacf`.

13.2. Other articles

There might be cases – most likely depending on your language – when you would like to have other articles behaving similar to the indefinite ones. Section 25 explains in detail how to define and use additional articles.

14. Foreign language acronyms

Sometimes and in some fields more often than in others abbreviations are used that are derived from another language. **ACRO** provides a number of properties for such cases:

foreign = {*long form in foreign language*} (initially empty)

Can be useful when dealing with acronyms in foreign languages, see section 14 for details.

foreign-plural = {*text*} Initial: s

The plural ending appended to the foreign form.

foreign-plural-form = {*text*} (initially empty)

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

foreign-format = {*code*} (initially empty)

The format used for the foreign form of the acronym.

foreign-babel = {*language*} (initially empty)

The babel or polyglossia language of the foreign form. This language is used to wrap the entry with `\foreignlanguage{language}` if either babel or polyglossia is loaded. You’ll need to take care that the corresponding language is loaded by babel or polyglossia.

14. Foreign language acronyms

`foreign-locale = {⟨language⟩}` (initially empty)

The language name that is output when the option `locale/display` is used. If this property is not set then the appropriate value might be derived from `foreign-babel`.

There are also some options:

`foreign/display = true|false` Initial: true

Determine whether to hide or display the foreign form.

`list/foreign/display = true|false` Initial: true

☆ New Determine whether to hide or display the foreign form in the list of acronyms.

`locale/display = true|false` Initial: false

This option determines whether the language of the foreign form is printed or not when the full form of the acronym is printed.

`list/locale/display = true|false` Initial: false

The same but for the list of acronyms.

`locale/format = {⟨code⟩}` Initial: `\em\text_titlecase_first:n`

Determines how said language is formatted when printed. The last command in `⟨code⟩` may take a mandatory argument.

Let's say you are writing a German document and are using the abbreviation ECU for Steuergerät which stems from the English "Electronic Control Unit". Then you can define it as follows:

```
1 \DeclareAcronym{ecu}{
2   short   = ECU ,
3   long    = Steuergerät ,
4   foreign = Electronic Control Unit ,
5   foreign-babel = english ,
6   foreign-locale = englisch
7 }
```

Now the abbreviation is introduced so that everyone understands the confusion:

```
1 \ac{ecu} \par
2 \acsetup{locale/display,locale/format=\emph}
3 \acf{ecu}
```

Steuergerät (Electronic Control Unit, ECU)

Steuergerät (*englisch*: Electronic Control Unit, ECU)

The property `foreign-babel` is used for ensuring correct hyphenation as long as you use `babel` or `polyglossia` and load the corresponding language, too. If you are writing your document in English then `ACRO` is able to deduce the language used for the "locale" field by itself:

```

1 \DeclareAcronym{eg}{
2   short = e.g.\acdote ,
3   long  = for example ,
4   foreign = exempli gratia ,
5   foreign-babel = latin ,
6   short-format = \textit ,
7   foreign-format = \textit
8 }

```

```

1 \acsetup{locale/display,first-style=short-long}
2 \acf{eg}

```

*e.g. (Latin: *exempli gratia*: for example)*

15. Upperasing

Depending on the kind of abbreviations you have and depending on their definition and maybe also depending on your language the long and sometimes also the short forms need to start with an uppercase letter at the beginning of a sentence while it starts with a lowercase letter otherwise.

For this **ACRO** provides uppercase versions for all predefined acronym commands listed in section 6. The usage is self-explaining:

```

1 There was \iacl{ufo} hovering \dots \par
2 \Aclp{ufo} were hovering \dots

```

There was a unidentified flying object hovering ...
unidentified flying objects were hovering ...

If you defined them with uppercase letters to begin with then these commands have no effect, of course.

```

1 \DeclareAcronym{ufo}{
2   short = UFO ,
3   long = Unidentified Flying Object
4 }

```


There are a number of options to control the uppercasing behavior:

`uppercase/first`

The default setting. Converts the first letter to uppercase.

`uppercase/title`

This is just a synonym of `first`.

`uppercase/all`

Converts *all* letters to uppercase.

`uppercase/none`

Converts *all* letters to *lowercase*

`uppercase/cmd = {⟨command⟩}`

All of the above options just choose the right command using this option internally. This means you can choose a different behavior altogether by setting this option to something else. For example you could use `\capitalisewords` from the package `mfirstuc` [Tal17]. The command needs to have one mandatory argument.

There may be reasons to exclude short forms from being uppercased. This can be controlled by this option:

`uppercase/short = true|false`

Initial: true

It allows you to disable the mechanism for the `short` and `alt` properties.

16. Citing and indexing

16.1. Citing

Acronyms can be given cite keys. This makes it possible to add a citation reference automatically when the acronym is used for the first time.

Let's see an example first. NY has been defined like this:

```
1 \DeclareAcronym{ny}{
2   short = NY ,
3   long = New York ,
4   plural = ,
5   tag = city ,
6   cite = NewYork
7 }
```

The property `cite` will now trigger `ACRO` to input `\cite{NewYork}` after the acronym:

```
1 \ac{ny}
```

New York (NY) [Wik20]

16. Citing and indexing

Depending on the citation style (and probably other factors, too) it might be desirable to add the citation rather inside the parentheses together with the short form of the acronym and even cited with a different command. For cases like these **ACRO** offers a number of options:

`cite/cmd = {⟨citation command⟩}` Initial: `\cite`

Choose the command with which citations are printed.

`cite/group = true|false` Initial: `false`

Decide whether to group citations with the short form in the parentheses. The template must support this. **ACRO**'s pre-defined templates *do* support it.

`cite/display = first|all|none` Initial: `first`

Decide whether to output the citation in the first/full usage only or always or never.

`cite/pre = {⟨text⟩}` Initial: `\nobreakspace`

Arbitrary code directly output before the citation.

`cite/group/cmd = {⟨citation command⟩}` Initial: `\cite`

Choose the command with which grouped citations are printed.

`cite/group/pre = {⟨text⟩}` Initial: `,_`

Arbitrary code directly output before the citation in the grouped case.

If for example you use biblatex's authoryear style [LKW19] you might want to have settings like these:

```
1 \acsetup{
2   cite/group = true ,
3   cite/cmd = \parencite ,
4   cite/group/cmd = \cite
5 }
```

```
1 \acsetup{cite/display = all}
2 \acf{ny} \\\
3 \ac{ny}
```

New York (NY, Wikipedia 2020)

NY (Wikipedia 2020)

16.2. Indexing

Maybe you want to add your acronyms to an index. In that case it is probably desirable to let **ACRO** make this automatically. In the simplest case just enable it:

`index/use = true|false` Initial: false
 Enable indexing.

`index/cmd = {\index command}` Initial: `\index`
 Choose a command for indexing.

`index/disable = {\code}` Initial: `\def\@{}`
 Sometimes it is desirable to change the meaning of a command inside an index entry. For the entries created by **ACRO** this can be achieved with this option.

`index/clear`
 This option clears the disable list.

While these options set global behavior there are also properties to set them for an acronym individually.

`index = {\text}` (initially empty)
 This property allows to overwrite the automatic index entry with an arbitrary one.

`index-sort = {\text}` if unused then equal to `sort`
 If you use the option `index` every occurrence of an acronym is recorded to the index and sorted by its short form or (if set) by the value of the `sort` property. This property allows to set an individual sorting option for the index.

`no-index = true|false` Initial: true
 This property allows to exclude an acronym from being indexed.

This manual is an example for the indexing feature. Each acronym from section A on page 54 that has been used in this manual is also listed in the index.

17. Barriers

The main purpose of the concept of barriers is to be able to have *local* lists of acronyms. This concept does a little bit more than that, though, which should become clear from the following options:

`barriers/use = true|false` Initial: false
 Activate usage of barriers. Otherwise the command `\acbarrier` just does nothing except writing a warning in the log.

`barriers/reset = true|false` Initial: false
 When set to true the acronym usage is reset for all acronyms at a barrier. The first use of `\ac` after a barrier will again look like the `\acf`.

`barriers/single = true|false` Initial: false
 When set to true a single usage of an acronym between two barriers with `\ac` will look according to the chosen style as explained in section 9 on page 13. This option only has an effect when the option `single` is used as well.

There are two natural barriers in a document: `\begin{document}` and `\end{document}`. You can add an arbitrary number of additional barriers with

`\acbarrier`

For this command to have any effect you must set `barriers/use` to true!



It usually takes two or even three \LaTeX runs until acronym usages between barriers are properly counted.

18. Trailing tokens

18.1. What is it about?

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

You have seen an example for this already:

```
1 \DeclareAcronym{etc}{
2   short = etc\acdot ,
3   long = et cetera ,
4   format = \textit ,
5   first-style = long ,
6   plural =
7 }
```

The macro `\acdot` recognizes if a dot is directly following. It only prints a dot if it doesn't.

```
1 \ac{etc} and \ac{etc}.           etc. and etc.
```

Another example: let's say you're a German scientist, you have

```
1 \DeclareAcronym{PU}{
2   short = PU ,
3   long = Polyurethan ,
4   long-plural = e
5 }
```

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.

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

Polyurethan(PU)-Hartschaum

This works because the template long-short⁶ uses `\acspace` at the appropriate place and the manual setup does

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

`\acspace` looks ahead for a trailing dash and adds a space if it doesn't find it.

18.2. How does it work?

Tokens to look for can be defined and activated through the following options:

`trailing/define = <token>{<name>}`

Defines token `<name>` and tells **ACRO** look for `<token>` if `<name>` is activated.

`trailing/activate = {<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.

`trailing/deactivate = {<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.

The package itself does this:

```
1 \acsetup{
2   trailing/define   = . {dot} ,
3   trailing/define   = {, {comma}} ,
4   trailing/define   = - {dash}
5   trailing/define   = \babelhyphen {babel-hyphen} ,
6   trailing/activate = {dot,comma}
7 }
```

6. The template that is used by default for the first appearance.

In order to make use of this mechanism there is the following command:

* `\aciftrailing{⟨csv list of token names⟩}{⟨true⟩}{⟨false⟩}`

Check if one of the tokens listed in `⟨csv list of token names⟩` is following and either place `⟨true⟩` or `⟨false⟩` in the input stream.

This command is used to define the two commands you already know:

* `\acdote`

Inserts `\abbrdot` if no dot follows.

* `\acspace`

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

* `\abbrdot`

Inserts `.\@`

The definitions are equivalent to the following code:

```
1 \newcommand*\acdote{\aciftrailing{dot}}{\abbrdot}
2 \newcommand*\acspace{\aciftrailing{dash, babel-hyphen}}{\space}
```

You are of course free to redefine them according to your needs.

19. Using or resetting acronyms

Sometimes it is necessary to mark an acronym as used before it actually has been used or to mark an acronym as unused even though it *has* been used. You have already seen one of the commands which make it possible:

`\acuse{⟨csv list of acronym ids⟩}`

Every acronym given in the list will be marked as used.

`\acuseall`

Every acronym is marked as used.

`\acreset{⟨csv list of acronym ids⟩}`

Every acronym given in the list will be reset.

`\acresetall`

Every acronym will be reset.



In a number of contexts all acronym commands act as if their starred form is used: in the table of contents, in the list of figures, and in the list of tables. The same is true for floats and the measuring phase of common table environments like `tabularx` or `ltxtable`.

20. Bookmarks, backlinks and accessibility support

20.1. Backlinks

When **ACRO** is used together with the package `hyperref` [ORT20] then you can make use of the following option:

`make-links = true|false`

Initial: false

If this is activated then every short or alternative appearance of an acronym will be linked to its description in the list of acronyms.



This will fail miserably together with local lists if an acronym appears in more than one list. This *might* be resolved on day.

20.2. Bookmarks

Since bookmarks (which are created by the `hyperref` or the `bookmark` packages [Obe19]) can only contain simple text **ACRO** simplifies the output of the acronym commands when they appear in a bookmark. Although the output can be modified with a dedicated template-mechanism there is no user interface at the moment. Contact me at <https://github.com/cgnieder/acro/issues> if you need it.

Acronyms have the property `pdfstring`:

`pdfstring = {<pdfstring>}`

if unused then equal to `short`

Used as PDF string replacement for the short form in bookmarks when used together with the `hyperref` [ORT20] or the `bookmark` package [Obe19].

This is for acronyms like

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

where the bookmark would write “pdf” instead of “PDF” if the property were not set.

20.3. PDF comments

Some people like see comments in the PDF when they’re hovering with the mouse over the short form of an acronym. This can be achieved.

`pdfcomments/use = true|false`

Initial: false

This enables the creation of PDF comments.

`pdfcomments/cmd = {⟨code⟩}` Initial: `\pdftooltip{#1}{#2}`

Chooses the command for actually creating the comment. You must refer to the printed output in the PDF with #1 and to the comment with #2. The default command `\pdftooltip` is provided by the package `pdfcomment` [Kle18]. You must load it in order to use it.

Only acronyms where the corresponding property has been set will get comments:

`pdfcomment = {⟨text⟩}`

Sets a tooltip description for an acronym.

20.4. Accessibility support

ACRO supports the `accsupp` package [Obe18] when you *also load hyperref*. Then **ACRO** uses

```
1 \BeginAccSupp{ method = pdfstringdef , ActualText = {PDF} }
2   \textsc{pdf}%
3 \EndAccSupp{ }%
```

for an acronym defined like this:

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

Without accessibility support when a string like “PDF” is copied from the PDF and pasted you get “pdf”. If you don’t care about that simply don’t load `accsupp` and ignore this section.

You have a few options to be able to manipulate what **ACRO** does here but I recommend to stay with the default settings:

`accsupp/use = true|false` Initial: `true`

When this is true and the package `accsupp` is loaded then accessibility support is used.

`accsupp/options = {⟨text⟩}` (initially empty)

Additional option to be passed to `\BeginAccSupp`. See the `accsupp` manual for possible settings.

`accsupp/method = {⟨method⟩}` Initial: `pdfstringdef`

The method used by `\BeginAccSupp`. See the `accsupp` manual for possible values.

The “ActualText” that is used by **ACRO** always defaults to the values of the acronym properties themselves. You can choose these values individually by setting the corresponding properties:

`short-acc = {\text{}}` if unused then equal to `short`
 Sets the ActualText property as presented by the accsupp package for the short form of the acronym.

`long-acc = {\text{}}` if unused then equal to `long`
 Sets the ActualText property as presented by the accsupp package for the long form of the acronym.

`alt-acc = {\text{}}` if unused then equal to `alt`
 Sets the ActualText property as presented by the accsupp package for the alternative short form of the acronym.

`foreign-acc = {\text{}}` if unused then equal to `foreign`
 Sets the ActualText property as presented by the accsupp package for the foreign form of the acronym.

`extra-acc = {\text{}}` if unused then equal to `extra`
 Sets the ActualText property as presented by the accsupp package for the extra information of the acronym.

`single-acc = {\text{}}` if unused then equal to `long-acc`
 Sets the ActualText property as presented by the accsupp package for a single appearance of the acronym.

`list-acc = {\text{}}` if unused then equal to `list`
 Sets the ActualText property as presented by the accsupp package for the appearance in the list of acronyms.

Extra care has to be taken for plural forms as these can not be picked up automatically right now. You have to explicitly set them for the accessibility support, too:

```

1 \DeclareAcronym{ufo}{
2   short = UFO ,
3   long = unidentified flying object ,
4   foreign = unbekanntes Flugobjekt ,
5   foreign-plural-form = unbekannte Flugobjekte ,
6   foreign-acc-plural-form = unbekannte Flugobjekte ,
7   foreign-babel = ngerman ,
8   long-indefinite = an
9 }
```

21. Localisation

There are places when `ACRO` uses text strings which depend on the language of the document. In order to recognize the language from babel of polyglossia and print the strings in the correct language `ACRO` uses the translations [Nie20].

Key	English	French	German
list-name	Acronyms	Acronymes	Abkürzungen
page	p.	p.	S.
pages	pp.	pp.	S.
sequens	f.	sq.	f.
sequentes	ff.	sqq.	ff.
also	also	aussi	auch
or	or	ou	oder
and	and	et	und

TABLE 1: Available translation keywords.

If the language is detected incorrectly or you want **ACRO** to use another language than it detects you can use the following option:

language = auto | *<language>* Initial: auto

The default setting auto lets **ACRO** detect the language setting automatically. Valid choices are all language names known to the package translations. Mostly just type your language and it should work.

ACRO only provides support for a handful of languages. You can easily teach **ACRO** your language – see section 26 on page 45 – if it isn't supported, yet.⁷

* **\acrotranslate**{*<key>*}

This command fetches the translation of *<key>* for the current language. It is meant for usage in template definitions.

Available keywords and their English, French, and German translations are shown in table 1.

22. Patches

In several situations it can lead to wrong results if **ACRO** marks an acronym as used too early or at all. This is why it is possible to disable the mechanism which is responsible:

\acswitchoff

This disables the mechanism which marks acronyms as used. After this command every acronym command like **\ac** acts like its starred version.

\acswitchon

This command enables the mechanism again.

In certain circumstances **ACRO** uses these commands itself. For example it is often preferable that acronyms are not counted as used in floats, the table of contents or the lists of figures and tables. This is why **ACRO** turns the mechanism off in these places.

⁷ If you like you can always open an issue at <https://github.com/cgnieder/acro/issues> and provide your translations so I can add them to **ACRO**.

Certain table environments typeset their contents twice for measurement purposes. **ACRO** tries to disable the usage mechanism during these phases. The same is true for single line captions from the caption package.

All these patches can be turned off:

<code>floats = true false</code>	<code>patch/</code>	Initial: true
En-/disable the <code>floats</code> patch.		
<code>lists = true false</code>	<code>patch/</code>	Initial: true
En-/disable the <code>lists</code> patch for the table of contents, the list of figures and the list of tables.		
<code>tabularx = true false</code>	<code>patch/</code>	Initial: true
En-/disable the <code>tabularx</code> patch.		
<code>ltxtable = true false</code>	<code>patch/</code>	Initial: true
En-/disable the <code>ltxtable</code> patch.		
<code>tabu = true false</code>	<code>patch/</code>	Initial: true
En-/disable the <code>tabu</code> patch.		
<code>caption = true false</code>	<code>patch/</code>	Initial: true
En-/disable the <code>caption</code> patch.		

Part III.

Extending **ACRO**

23. Background

23.1. Templates

One of the core ideas of **ACRO** version 3.0 is the use of *templates* which manage how different how anything is printed, from the output of `\ac` and friends to the list of acronyms. **ACRO** uses three types of templates:

acronym These templates can be used to define *acronym commands*, see section 28 on page 46.

list These templates are used by the `\printacronyms` command.

heading These templates only make sense if a *list* template uses `\acroheading`. This command makes use of them.

How these templates are defined, which are available from the start and how they are used is explained in section 23.

23.2. Objects

ACRO uses certain kinds of objects in some of its commands. It is possible to define own such objects:

articles Per default only the “indefinite” article is defined. But it is possible to define and add other articles to **ACRO**. This is explained in section 13.2 on page 22.

endings Per default only the ending “plural” is defined. But it is possible to define and add other endings to **ACRO**. This is explained in section 12.2 on page 21.

properties You have already learned about properties. It is possible to define and add further acronym properties to **ACRO**. This is explained in section 27 on page 46.

translations **ACRO** uses localisation strings at a number of places. It is possible to change these strings and add further strings. This is explained in section 21 on page 33.

24. Templates

24.1. Pre-defined templates

24.1.1. Acronym templates

alt

Display the alternative form of an acronym.

first

This is a *pseudo* template which always displays what is set through the option `first-style` or the property `first-style`.

footnote

A template for the first appearance where the long form is printed in a footnote.

long

Display the long form of an acronym.

long-short

A template for the first appearance where the long form is printed and the short form follows in parentheses.

first

This is a *pseudo* template which always displays what is set through the `single-style` or the property `single-style`.

short

Display the short form of an acronym.

short-long

A template for the first appearance where the short form is printed and the long form follows in parentheses.

show

A template which writes all properties of an acronym into the log file.

*24.1.2. List templates**description*

The default list style which places the short form in the item of a description environment and adds the all the rest as description of the item.

lof

A style which mimicks the list of figures. This style does not support page ranges.

longtable

A style that uses a `longtable` environment for building the list. This needs the `longtable` package [Car19] loaded.

longtabu

A style that uses a `longtabu` environment for building the list. This needs the `longtable` package and the `tabu` package [Che19] loaded.⁸

supertabular

A style that uses a `supertabular` environment for building the list. This needs the `supertabular` package [BJ20] loaded.

tabular

A style that uses a `tabular` environment for building the list. Since a `tabular` cannot break across pages this is only suited for short lists.

toc

A style which mimicks the table of contents. This style does not support page ranges.

*24.1.3. Header templates**addchap*

Only defined in a KOMA-Script class and if `\chapter` is defined. Uses `\addchap` for the heading.

addsec

Only defined in a KOMA-Script class. Uses `\addsec` for the heading.

chapter

Only defined if `\chapter` is defined. Uses `\chapter` for the heading.

*chapter**

Uses `\chapter*` for the heading.

8. Please note that this package currently is un-maintained and has a number of open bugs. For further information refer to <https://github.com/tabu-issues-for-future-maintainer/tabu>

none

Displays nothing.

*section*Uses `\section` for the heading.*section**Uses `\section*` for the heading.

24.2. Defining new templates

For the definition of templates these commands are available:

`\NewAcroTemplate[⟨type⟩]{⟨name⟩}{⟨code⟩}`This defines a template of type `⟨type⟩` with the name `⟨name⟩` which inserts `⟨code⟩` when used. A template of type `⟨type⟩` with name `⟨name⟩` must not exist. The default type is acronym.`\RenewAcroTemplate[⟨type⟩]{⟨name⟩}{⟨code⟩}`This re-defines a template of type `⟨type⟩` with the name `⟨name⟩` which inserts `⟨code⟩` when used. A template of type `⟨type⟩` with name `⟨name⟩` must exist. The default type is acronym.`\SetupAcroTemplate[⟨type⟩]{⟨name⟩}{⟨code⟩}`☆ New Adds `⟨code⟩` to the beginning of the template `⟨name⟩` of type `⟨type⟩`. The default type is acronym.`\SetupNextAcroTemplate[⟨type⟩]{⟨name⟩}{⟨code⟩}`☆ New Adds `⟨code⟩` to the beginning of *the next use* of the template `⟨name⟩` of type `⟨type⟩`. The default type is acronym.`\AcroTemplateType`Within a template this expands to the `⟨type⟩` of the current template.`\AcroTemplateName`Within a template this expands to the `⟨name⟩` of the current template.

How to use these commands is best explained by examples of how the existing templates have been defined. The following sections will show several examples for their usage.

24.3. Commands to be used in template definitions

`ACRO` provides and uses a large number of commands that are meant to be used in template definitions and that often are useless or will raise errors if used outside. Depending on their purpose the commands can be used in different types of templates or only in certain types of templates.In the descriptions below a `*` indicates a fully expandable command when used in an `\edef`, `\write` or in `\expanded`.A `TF` always refers to a `⟨true⟩` and `⟨false⟩` branch and indicates that *three* commands exist: one exactly as described, one with only the `T` and the `⟨true⟩` branch, and one with only the `F` and the `⟨false⟩` branch. So `\acroifTF` means there is `\acroifTF`, `\acroifT`, and `\acroifF`, where `\acroifT` and `\acroifF` each have an argument less than `\acroifTF`.

24.3.1. Commands for common uses

\acrolistname *Expands to whatever is currently set with `list/name`.**\acrowrite**{*<property>*}Prints the property *<property>* of the current acronym. Depending on the circumstances this prints the property together with an article or an ending either in uppercase or lowercase form. Default is the lowercase form without ending or article. The actual outcome is determined by switches which are explained in section 28 on page 46.**\acroformat**{*<type>*}{*<text>*}This formats *<text>* according to *<type>* where *<type>* has either been set as property or as option from the `format` module. Valid values are short, long, alt, extra, foreign, list, and first-long.**\acroshow**{*<property>*}For debugging puposes: writes the property *<property>* of the current acronym to the log file.**\acroifTF**{*<property>*}{*<true>*}{*<false>*}Checks if the property *<property>* has been set for the current acronym and either leaves *<true>* or *<false>* in the input stream.**\acroifbooleanTF**{*<property>*}{*<true>*}{*<false>*}Returns *<true>* if the boolean property *<property>* has been set to `true` and *<false>* otherwise.Introduced in
version v3.1

(2020/05/03)

\acroifallTF{*<properties>*}{*<true>*}{*<false>*}Checks if all properties in the csv list *<properties>* have been set for the current acronym and either leaves *<true>* or *<false>* in the input stream.**\acroifanyTF**{*<properties>*}{*<true>*}{*<false>*}Checks if any of the properties in the csv list *<properties>* has been set for the current acronym and either leaves *<true>* or *<false>* in the input stream.**\acroiftagTF**{*<tag>*}{*<true>*}{*<false>*}Checks if the current acronym has been given the tag *<tag>* and either leaves *<true>* or *<false>* in the input stream.**\AcroPropertiesMap**{*<code>*}Maps over all defined acronym properties. Within *<code>* you can refer to the current property with `#1`.

24.3.2. Commands for usage in acronym templates

*** \acroifusedTF**{*<true>*}{*<false>*}Checks if the current acronym has been used before and either leaves *<true>* or *<false>* in the input stream.

`\acroiffirstTF{<true>}{<false>}`

Checks if the current usage of the current acronym is the first time and either leaves `<true>` or `<false>` in the input stream.

`\acroifsingleTF{<true>}{<false>}`

Checks if the current acronym is used a single time and either leaves `<true>` or `<false>` in the input stream.

`\acrogroupcite`

24.3.3. Commands for usage in list templates

`\acroifchapterTF{<true>}{<false>}`

This just check if `\chapter` is defined. Used in the `toc` template.

`\acroifpagesTF{<true>}{<false>}`

This is `<true>` if the option `pages/display` is set, *and* the current acronym is not single, *and* has at least one page number. `<false>` otherwise.

`\acropages{<first>}{<range>}`

If `\acroifpagesTF` would be `<false>` this would do nothing. Otherwise, if `pages/display` is first it prints the first page number, preceded by `<first>` if `pages/name` is true. If `pages/display` is all it prints the page range, preceded by `<range>` if `pages/name` is true.

`\acronopagerange`

This disables page ranges. Used in the `toc` and `lof` templates.

`\acropagefill`

If `\acroifpagesTF` would be `<false>` this would do nothing. Otherwise it prints whatever is set by `pages/fill`.

`\acronymsmap{<code>}`

Maps over the acronyms in order of appearance in the list. Which acronyms these are depends on settings. They might only have certain tags, be ones local to barriers, ...

Within `<code>` `#1` refers to the current ID of the acronym. Also `\AcronymID` expands to the current ID. The latter is important for all the commands that check or print properties of acronyms.

`\acronymsmapTF{<code>}{<true>}{<false>}`

This does the same as `\acronymsmap` and also leaves `<true>` in the input stream if the list is not empty and `<false>` otherwise. This is useful to trigger a rerun warning.

`\AcronymTable`

This is an empty token list at the beginning of a list template.

`\AcroAddRow{⟨code⟩}`

Adds `⟨code⟩` to the right of `\AcronymTable` and ensures that `\AcronymID` has the correct global definition for this code. With this the code for the *tabular* template and other table templates can be built in a comfortable way.

`\AcroNeedPackage{⟨package⟩}`

Checks if the package `⟨package⟩` is loaded and throws an error otherwise.

`\AcroRerun`

Triggers `ACRO` to throw an “empty list” rerun warning.

24.4. New acronym templates

Some templates are quite short and self-explaining:

```
1 \NewAcroTemplate{short}{\acrowrite{short}}
```

Some are a little bit more elaborate:

```
1 \NewAcroTemplate{alt}{%
2   \acroifTF{alt}
3     {\acrowrite{alt}}
4     {\acrowrite{short}}}%
5 }
```

And some templates need to do a lot more:

```
1 \NewAcroTemplate{long-short}{%
2   \acroiffirstTF{%
3     \acrowrite{long}%
4     \acspace{%
5       \acroifT{foreign}{\acrowrite{foreign}, }%
6       \acrowrite{short}%
7       \acroifT{alt}{ \acrotranslate{or} \acrowrite{alt}}}%
8     \acrogroupcite
9   }%
10 }%
11 {\acrowrite{short}}}%
12 }
```

24.5. New list templates

This section shows the definition of three templates: *description*, *tabular*, and *toc*.

First the *description* template:

```

1 \NewAcroTemplate[list]{description}{%
2   \acroheading
3   \acropreamble
4   \begin{description}
5     \acronymsmapF{%
6       \item[\acrowrite{short}\acroifT{alt}{/\acrowrite{alt}}]
7         \acrowrite{list}%
8         \acroifanyT{foreign,extra}{ (}%
9         \acroifT{foreign}{\acrowrite{foreign}\acroifT{extra}{, }}%
10        \acroifT{extra}{\acrowrite{extra}}%
11        \acroifanyT{foreign,extra}{)}%
12        \acropagefill
13        \acropages
14        {\acrotranslate{page}\nobreakspace}
15        {\acrotranslate{pages}\nobreakspace}%
16      }
17      {\item\AcroRerun}
18    \end{description}
19  }

```

The following shows how to define templates using some kind of table environment. Special care is necessary due to the way \LaTeX tables work: first the table body is built and only then the table itself is printed:

```

1 \NewAcroTemplate[list]{tabular}{%
2   \AcroNeedPackage{array}%
3   \acronymsmapF{%
4     \AcroAddRow{
5       \acrowrite{short}%
6       \acroifT{alt}{/\acrowrite{alt}}
7       &
8       \acrowrite{list}%
9       \acroifanyT{foreign,extra}{ (}%
10      \acroifT{foreign}{\acrowrite{foreign}\acroifT{extra}{, }}%
11      \acroifT{extra}{\acrowrite{extra}}%
12      \acroifanyT{foreign,extra}{)}%
13      \acropagefill
14      \acropages
15      {\acrotranslate{page}\nobreakspace}
16      {\acrotranslate{pages}\nobreakspace}%
17      \tabularnewline
18    }%
19  }
20  {\AcroRerun}%
21  \acroheading

```

```

22 \acropreamble
23 \par\noindent
24 \begin{tabular}{>{\bfseries}lp{.7\linewidth}}
25   \AcronymTable
26 \end{tabular}
27 }

```

```

1 \NewAcroTemplate[list]{toc}{%
2   \acroheading
3   \acropreamble
4   \acronopagerange
5   \acronymsmapF{%
6     \contentsline{\acroifchapterTF{chapter}{section}}
7       {\acrowrite{short}\acroifT{alt}{/\acrowrite{alt}}}{%
8       {}{}%
9     \contentsline{\acroifchapterF{sub}section}
10      {
11        \acrowrite{list}%
12        \acroifT{foreign}{\acrowrite{foreign}\acroifT{extra}{, }}%
13        \acroifT{extra}{\acrowrite{extra}}%
14        \acroifanyT{foreign,extra}{}}%
15      }
16      {\acropages{}}{}%
17    }%
18  }
19  {\AcroRerun}
20 }

```

24.6. New heading templates

25. Endings

Referring to section 12.2 on page 21 this section explains how to define and use additional endings.

`\DeclareAcroEnding{⟨name⟩}{⟨short default⟩}{⟨long default⟩}`

This command can be used to define properties and options analogous to the plural endings which have been defined this way:

```

1 \DeclareAcroEnding{plural}{s}{s}

```

In general `\DeclareAcroEnding{⟨foo⟩}{⟨x⟩}{⟨y⟩}` defines these options

`short-⟨foo⟩-ending = {⟨value⟩}`

Initial: `⟨x⟩`

<code>long-⟨foo⟩-ending = {⟨value⟩}</code>	Initial: ⟨y⟩
and these properties	
<code>short-⟨foo⟩ = {⟨value⟩}</code>	Initial: ⟨x⟩
<code>short-⟨foo⟩-form = {⟨value⟩}</code>	(initially empty)
<code>alt-⟨foo⟩ = {⟨value⟩}</code>	Initial: ⟨x⟩
<code>alt-⟨foo⟩-form = {⟨value⟩}</code>	(initially empty)
<code>long-⟨foo⟩ = {⟨value⟩}</code>	Initial: ⟨y⟩
<code>long-⟨foo⟩-form = {⟨value⟩}</code>	(initially empty)
<code>foreign-⟨foo⟩ = {⟨value⟩}</code>	Initial: ⟨y⟩
<code>foreign-⟨foo⟩-form = {⟨value⟩}</code>	(initially empty)
<code>single-⟨foo⟩ = {⟨value⟩}</code>	Initial: ⟨y⟩
<code>single-⟨foo⟩-form = {⟨value⟩}</code>	(initially empty)
<code>extra-⟨foo⟩ = {⟨value⟩}</code>	Initial: ⟨y⟩
<code>extra-⟨foo⟩-form = {⟨value⟩}</code>	(initially empty)

In addition another command is defined which is meant to be used in template definitions.

`\acro⟨foo⟩`

This command tells the template that the ending *⟨foo⟩* should be used.

Section 28 on page 46 has an example of how this can be used to define a possessive ending and commands that make use of them like this:

```
1 \acfg{MP}
```

Member's of Parliament (MP's)

26. Articles

Referring to section 13.2 on page 22 this section explains how to define and use additional articles.

`\DeclareAcroArticle{⟨name⟩}{⟨default⟩}`

This command can be used to define properties and options analogous to the indefinite article which have been defined this way:

```
1 \DeclareAcroArticle{indefinite}{a}
```

In general `\DeclareAcroArticle{⟨foo⟩}{⟨x⟩}` defines the option

`⟨foo⟩ = {⟨value⟩}` Initial: `⟨x⟩`

and these properties

`short-⟨foo⟩ = {⟨value⟩}` Initial: `⟨x⟩`

`alt-⟨foo⟩ = {⟨value⟩}` Initial: `⟨x⟩`

`long-⟨foo⟩ = {⟨value⟩}` Initial: `⟨x⟩`

`foreign-⟨foo⟩ = {⟨value⟩}` Initial: `⟨x⟩`

`single-⟨foo⟩ = {⟨value⟩}` Initial: `⟨x⟩`

`extra-⟨foo⟩ = {⟨value⟩}` Initial: `⟨x⟩`

In addition another command is defined which is meant to be used in template definitions.

`\acro{foo}`

This command tells the template that the article `⟨foo⟩` should be used.

Section 28 on page 46 has examples of how this can be used to define definite articles and commands that make use of them like this:

```
1 \dacs{hadopi} \par
2 \dacl{hadopi}
```

l'HADOPI

Haute Autorité pour la diffusion des œuvres et la protection des droits sur l'Internet

27. Translations

For adding additional keywords, or for adding translations to existing keywords, or for changing existing translations **ACRO** uses this command:

`\DeclareAcroTranslation{⟨key⟩}{⟨language=translation list⟩}`

With this command new translations keywords can be added and translations for existing keywords can be changed.

`\AddAcroTranslations{⟨key⟩}{⟨language=translation list⟩}`

Basically the same but this time per language rather than per keyword.

As an example this is how **ACRO** declares translations for the pages keyword:

```

1 \DeclareAcroTranslation{pages}{
2   Fallback    = pp\abbrdot ,
3   English     = pp\abbrdot ,
4   French      = pp\abbrdot ,
5   German      = S\abbrdot ,
6   Portuguese  = pp\abbrdot
7 }

```

Translations for a language could be added this way⁹:

```

1 \AddAcroTranslations{Italian}{
2   list-name = Acronimi ,
3   page      = p\abbrdot ,
4   pages     = pp\abbrdot ,
5   sequens   = s\abbrdot ,
6   sequentes = ss\abbrdot ,
7   also      = anche ,
8   and       = e ,
9   or        = o
10 }

```

The existing keywords had been shown in table 1 on page 34.

28. Properties

As you know from section 5 **ACRO** comes with quite a number of predefined properties which control various aspects of acronyms. However, there are cases when additional properties would be nice to have and to use. It can be done with the following command:

```
\DeclareAcroProperty*?!|>{<name>}
```

This defines the new property *<name>*. The command has five optional arguments most of which you probably never need.

The optional star *** ensures that each acronym gets a *unique* value for the property.

The optional question mark *?* creates a *boolean* property. That is a property that only can get the values *true* or *false* and when it is used without value (not an empty value!) then *true* is assumed.

The optional exclamation mark *!* creates a *mandatory* property. An error is raised if an acronym does not set it.

The optional pipe *|* creates a *static* property which means its value is written to an auxiliary file and read in again at begin document. Once set the value is the same throughout the document.

⁹. **ACRO** already has the translations for Italian.



The optional greater as symbol > creates a *display* property. This additionally defines the two boolean options $\langle name \rangle/\text{display}$ and $\text{list}/\langle name \rangle/\text{display}$, both initially set to true. If these options are set to false the acronym commands or the list act as if the property $\langle name \rangle$ has not been set. The `foreign` property is an example.

`\DeclareAcroPropertyAlias*?!|>\langle name1 \rangle\{\langle name2 \rangle\}`

This newly declares property $\langle name1 \rangle$ and makes it an alias of property $\langle name2 \rangle$. This means that $\langle name1 \rangle$ gets the same value that $\langle name2 \rangle$ has unless it is set explicitly. Property $\langle name2 \rangle$ must exist.

`\MakeAcroPropertyAlias\langle name1 \rangle\{\langle name2 \rangle\}`

This makes property $\langle name1 \rangle$ and makes it an alias of property $\langle name2 \rangle$. Both properties must exist.

Exmaples for defining and using new properties are shown in section A, for example, examples 8 or 9.

29. Own acronym commands

29.1. Background

You can define own acronym commands or redefine the existing ones with commands similar to `\NewDocumentCommand` from the xparse package [L3P].

`\NewAcroCommand\langle command \rangle\{\langle arg. spec. \rangle\}\{\langle code \rangle\}`

This creates the new command $\langle command \rangle$ with the argument specification¹⁰ so $\langle arg. spec. \rangle$ and replacement text $\langle code \rangle$. There are significant differences to `\NewDocumentCommand`: the new command always has two additional arguments: an optional star and an optional argument for options. You can ignore this fact in your definition, though. However, the command *must* at least have one argument *and* the first argument *must* refer to the ID. Everything else is up to you.

The new command has the suiting framework to recognize trailing tokens, count usage, index, and add a citation if necessary.

`\RenewAcroCommand\langle command \rangle\{\langle arg. spec. \rangle\}\{\langle code \rangle\}`

Like `\NewAcroCommand` but redefines an existing command.

`\UseAcroTemplate[\langle type \rangle]\{\langle name \rangle\}[\langle argument number \rangle]\langle arguments \rangle`

The argument $\langle type \rangle$ defaults to acronym and $\langle argument number \rangle$ defaults to 1. The command must be followed by as many mandatory arguments as you specify with $\langle argument number \rangle$. All predefined acronym templates use the first argument as ID so they must use one argument.

Let's see an example. This is the definition of `\ac`:

¹⁰. in the sense of an xparse command.

```
1 \NewAcroCommand\ac{m}{\UseAcroTemplate{first}{#1}}
```

Equivalent definitions would be:

```
1 \NewAcroCommand\ac{m}{\UseAcroTemplate[acroynm]{first}{#1}}
2 \NewAcroCommand\ac{m}{\UseAcroTemplate[acroynm]{first}[1]{#1}}
3 \NewAcroCommand\ac{m}{\UseAcroTemplate{first}[1]{#1}}
4 \NewAcroCommand\ac{m}{\UseAcroTemplate{first}[2]{#1}{}}
```

There are a number of switch commands which determine a certain behavior. They tell the following template how to interpret certain conditionals and how to use `\acrowrite`.

`\acrocite`

Tells **ACRO** to output the citation.

`\acrodonotuse`

Tells **ACRO** to not count this as usage.

`\acroplural`

Use plural form.

`\acroindefinite`

Use indefinite article

`\acroupper`

Use uppercase form.

`\acrofull`

Use first or full form.

Here is an example that makes use of them:

```
1 \NewAcroCommand\Iacs{m}{%
2   \acroupper\acroindefinite\UseAcroTemplate{short}{#1}%
3 }
```

29.2. Create commands for possessive endings

Let's say you want to add an ending for the genitive case. First you define the appropriate ending:

```
1 \DeclareAcroEnding{possessive}{'s'}{'s'}
```


Then you define commands which make use of this ending:

```

1 \NewAcroCommand\acg{m}{\acropossessive\UseAcroTemplate{first}{#1}}
2 \NewAcroCommand\acsg{m}{\acropossessive\UseAcroTemplate{short}{#1}}
3 \NewAcroCommand\aclg{m}{\acropossessive\UseAcroTemplate{long}{#1}}
4 \NewAcroCommand\acfg{m}{%
5   \acrofull
6   \acropossessive
7   \UseAcroTemplate{first}{#1}%
8 }
9 \NewAcroCommand\iacsg{m}{%
10  \acroindefinite
11  \acropossessive
12  \UseAcroTemplate{short}{#1}%
13 }
```

You maybe also define acronyms with corresponding properties¹¹:

```

1 \DeclareAcronym{MP}{
2   short = MP ,
3   long  = Member of Parliament ,
4   plural-form = Members of Parliament ,
5   long-possessive-form = Member's of Parliament
6 }
```

Now you can use it like this:

```
1 This is the \acg{MP} first day at work after \dots
```

This is the MP's first day at work after ...

30. Own **ACRO** style files

When you want to use your definitions regarding **ACRO** repeatedly then it makes sense to put them in a file which you put somewhere in your local \LaTeX tree. There are three options:

1. Put them in a simple .tex file in `\input` it.
2. Put in in a .sty file and include it with `\usepackage after ACRO.`
3. Create a style file following this pattern decribed below.

¹¹. Bear with me if this is incorrect: English is not my native language.

30. Own *ACRO* style files

`acro.style.<name>.code.tex`

This file should start with

```
1 \AcroStyle{name}
```

and input the file with `\acsetup` using the option

`load-style = {<name>}`

This is more or less the same as if you'd use the package variant but naturally ensures that you load it after *ACRO* and in the future might provide other bells and whistles, too.

The command

`\AcroStyle*{<style>}[<details>]`

has an optional star which switches to `expl3` syntax. It also has an optional argument `<details>` with the same purpose and usage as the one from `\ProvidesPackage`. A typical usage would look like

```
1 \AcroStyle{abbrev}[2020/04/21 abbreviations with acro (CN)]
2 \NewDocumentCommand\newabbreviation{mmm}{%
3   \DeclareAcronym{#1}{ short = #2 , #3 , class = abbrev , no-index }%
4 }
5 \NewDocumentCommand\printabbreviations{0{}}{%
6   \printacronyms[#1,include=abbrev]%
7 }
```

Part IV.

Appendix

A. Examples

Example 1: Basic usage

Links: [\[T_EX\]](#) [\[PDF\]](#)

File: `acro.example.basic.tex`

```
7
8 \acsetup{
9   make-links ,
10  pages / display = first ,
11  pages / fill    = {, }
12 }
13
14 \DeclareAcronym{CDMA}{
```

1 Intro

In the early nineties, **GSM** was introduced for the first time into the use of Time Division Mul

Example 2: Re-implement `\acflike`

Links: [\[T_EX\]](#) [\[PDF\]](#)

File: `acro.example.acflike.tex`

```
7 \RenewAcroCommand\acflike{mm}{%
8   \acroformat{long}{#2} (\UseAcroTemplate{short
9   }{#1})%
10 }
11 \begin{document}
12
13 \ac{cd} \par
14 \acflike{cd}{Rohling}
```

Compact Disc (CD)
Rohling (CD)

A. Examples

Example 3: Invisible command for backref

Links: [\[T_EX\]](#) [\[PDF\]](#) [\[github\]](#)

File: `acro.example.issue-109.tex`

```
7 pages/seq=false
8 }
9
10 \DeclareAcronym{ny}{
11   short = NY ,
12   long = New York ,
13 }
```

nothing

Example 4: Defining a definite article

Links: [\[T_EX\]](#) [\[PDF\]](#) [\[github\]](#)

File: `acro.example.issue-111.tex`

```
7 \NewAcroCommand\dacs{m}{\acrodefinite\
   UseAcroTemplate{short}{#1}}
8 \NewAcroCommand\Dacs{m}{\acroupper\acrodefinite\
   UseAcroTemplate{short}{#1}}
9 \NewAcroCommand\dacL{m}{\acrodefinite\
   UseAcroTemplate{long}{#1}}
10 \NewAcroCommand\DacL{m}{\acroupper\acrodefinite\
   UseAcroTemplate{long}{#1}}
11
12 \DeclareAcronym{hadopi}{
13   short = HADOPI ,
14   long = Haute Autorit\'e pour la diffusion des
       \oe uvres et la protection des
```

l'HADOPI
La Haute Autorité po
sur Internet

Example 5: Write the list of acronyms to an external file

Links: [\[T_EX\]](#) [\[PDF\]](#) [\[github\]](#)

File: `acro.example.issue-119.tex`

```
7 \if@filesw
8   \newwrite\acro@list
9   \immediate\openout\acro@list\jobname.ac\relax
10  \immediate\write\acro@list{\string\begin{
description}}
11  \let\item\relax
12  \acronymsmapF{%
13    \immediate\write\acro@list{%
14      \space\space
```

A. Examples

Example 6: Insert word between acronym and citation

Links: [\[T_EX\]](#) [\[PDF\]](#) [\[github\]](#)

File: `acro.example.issue-154.tex`

```
7 short = UC ,
8 long = Universal Composability ,
9 cite = xxx
10 }
11
12 \begin{document}
13
14 We use the \ac{uc}[ model] for\dots
```

We use the Universal

Example 7: How to define a possessive ending

Links: [\[T_EX\]](#) [\[PDF\]](#)

File: `acro.example.possessive.tex`

```
7 \NewAcroCommand\acsg{m}{\acropossessive\
  UseAcroTemplate{short}{#1}}
8 \NewAcroCommand\aclg{m}{\acropossessive\
  UseAcroTemplate{long}{#1}}
9 \NewAcroCommand\acfg{m}{%
10 \acrofull
11 \acropossessive
12 \UseAcroTemplate{first}{#1}%
13 }
14 \NewAcroCommand\iacsg{m}{%
```

Member's of Parliame
MP's
Member's of Parliame
Member's of Parliame
a MP's

Example 8: Additional alternative form

Links: [\[T_EX\]](#) [\[PDF\]](#) [\[forum\]](#)

File: `acro.example.texsx-505891.tex`

```
7 \RenewAcroTemplate[list]{description}{%
8 \acroheading
9 \acropreamble
10 \begin{description}
11 \acronymsmapF{
12 \item [%
13 \acrowrite{short}%
14 \acroifT{alt}{/}\acrowrite{alt}%
```

Acronyms

four another description

one/two/three common

A. Examples

Example 9: Foreign short form

Links: [\[T_EX\]](#) [\[PDF\]](#) [\[forum\]](#)

File: `acro.example.texsx-507726.tex`

```

7
8 \RenewAcroTemplate{long-short}{%
9   \acroiffirstTF{%
10    \acrowrite{long}\acspace
11    (%
12    \acrowrite{short}%
13    \acroifTF{foreign}{, }%
14    \acrowrite{foreign}%

```

Datenschutz-Grundve-
lation“, GDPR)

Abkürzungen

DSGVO Datenschutz-G
tion“, GDPR)

Example 10: Species

Links: [\[T_EX\]](#) [\[PDF\]](#) [\[forum\]](#)

File: `acro.example.texsx-513623.tex`

```

7   #1 ,
8   tag = species ,
9   first-style= long ,
10  format = \itshape
11  }%
12 }
13 \newspecies{ecoli}{E.~coli}{Escherichia coli}

```

First use: *Escherichia*
Second use: *E. coli*

Example 11: Capitalization

Links: [\[T_EX\]](#) [\[PDF\]](#) [\[forum\]](#)

File: `acro.example.texsx-515295.tex`

```

7   short = 3-APA ,
8   long = \iupac{3-azido-1-propyl|amine}
9   }
10  \DeclareAcronym{CuAAC}{
11   short = \enquote{click} chemistry ,
12   long = copper(I)-catalyzed azide-alkyne
        cycloaddition
13  }

```

1: 3-Azido-1-propylan
2: “Click” chemistry
3: Copper(I)-catalyze

Example 12: Articles and possessive forms

Links: [T_EX] [PDF] [forum]File: `acro.example.tex``sx-542461.tex`

```

7 \NewAcroCommand\Dac{m}{\acroupper\acrodefine\
  UseAcroTemplate{first}{#1}}
8
9 \NewAcroCommand\Dacg{m}{%
10 \acroupper
11 \acrodefine
12 \acropossessive
13 \UseAcroTemplate{first}{#1}%
14 }

```

Bob hails from the Ce
 Bob hails from CSS.
 The Centre for Spagh
 CSS's mandate is bro
 The Centre for Spagh
 CSS scientists eat wel

B. Acronyms

Below all abbreviations are listed which have been defined for the manual.

CD	compact disc	4, 13
CTAN	Comprehensive T _E X Archive Network	
e.g.	for example (<i>Latin: exempli gratia</i>)	
ECU	Steuergerät (<i>Englisch: Electronic Control Unit</i>)	23
etc.	<i>et cetera</i>	13, 28
HADOPI	Haute Autorité pour la diffusion des œuvres et la protection des droits sur l'Internet	44
ID	identification string	6 f., 39, 46 f.
JPEG/JPG	Joint Photographic Experts Group	12
LA	Los Angeles	
LPPL	L ^A T _E X Project Public License	
MP	Member of Parliament	21, 43, 48
NATO	Organisation des Nordatlantikvertrags (<i>Englisch: North Atlantic Treaty Organization</i>)	
NY	New York	25
PDF	Portable Document Format	9, 19, 31 f.
PNG	Portable Network Graphics	
PU	Polyurethan	

T_EX.sx T_EX StackExchange

UFO unidentified flying object (*German*: unbekanntes Flugobjekt) 11, 21 f., 24

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