

ABSTRACT

The package ccref is aimed at helping `\cref` addressing the definite articles properly (especially for the article contractions in many European languages).

/ 1 /

The motivation

1 By default, when using cleveref’s `\cref` to reference theorem-like environments, the names  
2 do not contain definite articles. This may be acceptable for English, but certainly not good  
3 enough for languages such as French, Italian, Portuguese, Spanish, etc. – in these cases there  
4 shall be grammatical errors and would give you a strong feeling that it is machine-generated.

5 As an example, if we define the French names to be:

```
\crefname{theorem}{le théorème}{les théorème}  
\crefname{proposition}{la proposition}{les propositions}
```

6 then when one writes (which means “*We can deduce this from ...*” in French)

```
On peut le déduire de \cref{thm1,thm2,prop3}.
```

7 the result would be

On peut le déduire **de les** théorèmes 1 et 2 et **la** proposition 3.

8 which is wrong, as the correct result should be:

On peut le déduire **des** théorèmes 1 et 2 et **de la** proposition 3.

9 `\cref` cannot handle such cases correctly — and that is when `\ccref` comes into play.

/ 2 /

The usage

2.1 | How to load it?

10 Simply load the package with

```
\usepackage{ccref}
```

TIP

- ccref uses cleveref internally, thus it should usually be placed at the last of your preamble.
- To handle article contractions correctly, `\ccref` shall detect the current language, thus you need to use packages such as babel or polyglossia to set your languages appropriately.

## 2.2 | How to use it ?

Then you can use the command `\ccref` as follows:

- `\ccref[⟨prep⟩]{⟨labels⟩}`
  - This will pass the preposition `⟨prep⟩` to the first definite article.
- `\ccref*[⟨prep⟩]{⟨labels⟩}`
  - This will pass the preposition `⟨prep⟩` to every definite article.

However, before using it, you should first define the `\crefname` carefully. The definite article in `\crefname` needs to be marked manually using `\ccmarkart`, for example:

```
\crefname{theorem}{\ccmarkart{le} théorème}{\ccmarkart{les} théorème}
```

/ 3 /

### Example

Let us come back to the example at the beginning, now you can do this:

```
\crefname{theorem}{\ccmarkart{le} théorème}
{\ccmarkart{les} théorème}
\crefname{proposition}{\ccmarkart{le} proposition}
{\ccmarkart{les} propositions}
```

And the sentence shall be written as<sup>1</sup>:

On peut le déduire `\ccref*[de]{thm1,thm2,prop3}`.

which would result in:

On peut le déduire **des** théorèmes 1 et 2 et **de la** proposition 3.

As another example, with

Pensez `\ccref*[à]{thm1,thm2,prop3}`.

one would get something like:

Pensez **aux** théorèmes 1 et 2 et **à la** proposition 3.

/ 4 /

### Known issues

- `ccref` currently only works for French, Italian, Portuguese (both European and Brazilian) and Spanish, certainly more would be added to this list.
- In the case that the initial letter of `⟨prep⟩` is capitalized, `ccref` cannot yet handle the case changes automatically. However, this should be a rare occurrence.
- The names of theorem-like environments are not provided — for the moment you need to define them all by yourself. However, users are encouraged to use the [ProjLib](#) toolkit, which already handles everything for you.

<sup>1</sup>Here the starred version is used because we want the preposition “de” to be passed to every definite article.