cid – Official class for submissions to the "Commentarii informaticae didacticae"*

Martin Sievers**

Released 2023/11/21

Abstract

The cid bundle is used for writing articles to be published in the "Commentarii informaticae didacticae (CID)". The LTEX class file is based on the class used for the "Lecture Notes in Informatics (LNI)" (GitHub).

1 Introduction

The Last for the "Commentarii informaticae didacticae (CID)" is based on the established work for the "Lecture Notes in Informatics", maintained mainly by Oliver Kopp and Martin Sievers (cf. https://github.com/gi-ev/LNI)

This is the first public release. I would like to thank the "Universitätsverlag Potsdam" (especially Felix Will and Marco Winkler) and the editors of CID 13 (especially Simone Opel) for their suggestions and testing.

2 Installation

This version of the cid bundle is distributed via GitHub and (preferably) CTAN.

The later is the basis for all updates of the two main TeX distributions MiKTeX and TeX Live. Thus the easiest way to get all files needed to typeset an article for the *Commentarii informaticae didacticae* is to use the package manager of your distribution.

There is also a template on Overleaf.

For a manual installation please call pdflatex lni.dtx at least twice and copy all resulting files (cls, tex, pdf) to your local TEXMF tree. Don't forget to update your file name database.

^{*}This file describes version v1.0, last revised 2023/11/21.

 $^{{\}bf **Email: martin. sievers@schoener publizier en. de}\\$

3 Usage

To use the predefined layout for a (German) submission to the *Commentarii informaticae didacticae* just load the class file as usual with \documentclass{cid}.

The class file loads a bunch of packages which are all part of modern TeX distributions. Therefore, if you are confronted with a missing package, please try to download and install it using your distribution's package manager. Alternatively go to CTAN to download missing packages.

The cid class can be used with PDF LATEX as well as with XELATEX and LualATEX.

3.1 Options

Although the class file includes all layout information for a submission to the *Commentarii informaticae didacticae*, there are options to adapt the output one way or another.

- english (Opt) A document loading the Commentarii informaticae didacticae class file uses German language adoptions by default. To switch to English, just load the class with option english. The language influences the hyphenation patterns and terms used in the text.
 - crop (*Opt*) Option crop gives you some crop marks (using the package crop) to better illustrate the final result of your article.
- nocleveref (Opt) When referencing figures, one has to type Figure~\ref{ $\langle label \rangle$ }. The package cleveref reduces the effort by offering the command \cref{ $\langle label \rangle$ }. This can be used with all floating objects. The package is loaded by default. In case it causes issues, one can disable it using with the nocleveref option.
- nohyperref (*Opt*) hyperref is used for colored hyperlinks within the articles. If you consider problems or just do not want that feature, you can disable it by using the option nohyperref.
- norunningheads (*Opt*) To easily remove all running headers from your document, you can use the option norunningheads.

4 Setting up a document

You can use the file cid-author-template.tex as a starting point for setting up a document for submission. The cid class uses the standard ways to build an article.

4.1 Special meta comments

There is not just one "TEX" and one "bibliography tool", but many different ways to transform a .tex file into a PDF. Some TEX editors like TeXstudio, TeXmaker and TeXshop support a special set of meta comments to give some information, how to deal with a concrete document.

A typical example looks like:

```
% !TeX program = pdflatex
% !BIB program = biber
% !TeX encoding = UTF-8
% !TeX spellcheck = en_US
\documentclass[english]{cid}
```

4.2 Title page

\title \subtitle The title of your work is given using the \title macro. In addition to the title itself, you can add a short title to be used in the header of a page:

```
\title[Short title]{Title}
```

You can also add a subtitle by \subtitle $\{\langle subtitle \rangle\}$.

\author \affil The authors of an article are given using an extended \author macro, which holds not only the name, but also email adress and ORCID iD. Moreover the affiliation marker (number) is given as an optional argument. Affiliations are added with \affiliations[$\langle number \rangle$]{ $\langle information \rangle$ } where you can use \\ to split the address.

```
\author[1]{Vorname1 Nachname1}{vorname.name@affiliation1.de 
     }{0000-0000-0000-0000}
\author[2]{Firstname2 Lastname2}{vorname.name@affiliation2.de 
     }{0000-0000-0000-0000}
\author[1]{Firstname3 Lastname 3}{vorname.name@affiliation1.de 
     }{0000-0000-0000-0000}
\author[1]{Firstname4 Lastname 4}{vorname.name@affiliation1.de 
     }{0000-0000-0000-0000}%
\affil[1]{Universität\\Abteilung\\Straße\\Postleitzahl Ort\\Land}
\affil[2]{University\\Department\\Address\\Country}
```

Leave the third and/or fourth argument empty if there is no email address and/or ORCID iD. Finally \maketitle will output the formatted title page.

4.3 Abstract and keywords

abstract (env.) Each article should start with a short (70 to 150 words) abstract and some keywords. Reywords (env.) Please use the environments abstract and keywords for that purpose:

```
\and \begin{abstract}
Tell the reader what your article is about
\end{abstract}
\begin{keywords}
Give some keywords to categorize your article. You can use \and between two keywords to get the correct delimiter (semicolon plus space) automatically.
\end{keywords}
```

4.4 Page header

The template automatically sets the page headers according to the requirements of *Commentarii informaticae didacticae*. From page 2 onwards, the title and the authors are printed. These information have to stay in one line. In case the title is too long, use the optional argument for \title:

```
\title[short title]{title}
```

4.5 Main text

4.5.1 Headings

\section \subsection \subsubsection You can use the standard macros $\ensuremath{\verb|Section|}$, $\ensuremath{\verb|Subsection|}$, ... for sectioning your text.

(Subsubsection

4.5.2 Footnotes

\footnote

\paragraph

For adding a footnote, just use $\{\text{footnote } text\}$ where needed. Please note, that the footnote counter is automatically set to the correct value at the beginning of your text, i. e. it respects the number of affiliations given on the title page.

4.5.3 Lists

itemize (env.)
enumerate (env.)

The cid class redefines the standard lists environments itemize and enumerate to meet the requirements of the *Commentarii informaticae didacticae*.

Lists can be filled as usual by adding \item macros.

4.5.4 Floating objects

figure (env.) table (env.)

The environments figure and table can be used the standard way to include graphics or tables resp.

However, please note, that the default placement parameters are changed to htbp by the class cid. If you need some local adjustment, please use the optional argument of both environments (cf. Listing 4.5.4).

\caption \label

A caption should be added by \caption{ $\langle caption\ text \rangle$ }, followed immediately by a \label{\lambda unique label}} entry. For figures the caption should be added below the graphic, for tables place it above tabular:

```
\begin{figure}[tb]
  \includegraphics{...}
  \caption{...}
  \label{...}
\end{figure}
```

If you want to center floats, please *do not* use the center environment, but the macro \centering, which does not add extra white space (cf. Listing 4.5.4).

```
\begin{table}
  \centering
  \caption{...}
  \label{...}
  \begin{tabular}{lll}
  ...
  \end{tabular}
\end{table}
```

4.5.5 Listings/Source code

The cid bundle loads the verbatim and listings package. While the former is there for compatability, the later is the standard way of integrating source code listings into a Later to document.

However, there are currently no config files shipped with the cid bundle. Please consult the documentation for help on setting up listings for a specific programming language.

4.5.6 Math

For using math the amsmath package is loaded by default. You can load package mathtools for additional features.

4.5.7 Abbreviations and initialisms

\ie \cf \etal

\ea

To achieve consistent typesetting of common abbreviations, macros are predefined by the class. These macros should *consistently* being used instead of writing the plain version. For example use $\ensuremath{\verb{cg.rather}}$ than e.g., The macros take care of spacing within and after the abbreviations.

- \eg for e.g.
- \ie for i.e.
- \cf for cf.
- \etal for et al.

\cidinitialism

You can add your own initialisms by stating \cidinitialism{ $\langle \text{\initialism_macro} \rangle$ }{ $\langle \text{text} \rangle$ } in the preamble. Then use the new macros within your text wherever needed.

4.6 Bibliography

The cid class uses biblatex by default together with the biblatex style "lni" provided by biblatex-lni. However, you have to add information on the bib file(s) in your document

using $\addbibresource(\Bib\ file(s))$ and call \printbibliography at the end of your document.

Please note, that the cid class sets biber as the default bibliography tool. biber is part of both major TeX distributions and can easily be used within most TeX editors, e. g. by using special meta data as described in Section 4.1.

```
% !TeX program = pdflatex
% !BIB program = biber
\documentclass[]{cid}
...
\addbibresource{FILENAME.bib}
...
\begin{document}
...
\printbibliography
...
\end{document}
```

5 Trouble shooting

If you have any problems using the class file please head to the awesome Last list.

6 Bugs and feature request

If you find a bug or have a feature request, please contact me. You can open an "issue" at the GitHub website.