

# The C.D.P. Bundle\*

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## Abstract

A bundle of L<sup>A</sup>T<sub>E</sub>X (former L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>) classes and packages is described, which was used by the *Coordinamento dei Dottorandi e dei Dottori di Ricerca dell'Università di Padova* (a free and informal association of Ph.D. students and Ph.D.'s at the university of Padua, Italy) to write its “official” letters. These classes and packages took care of formatting the letters as required by the standards of this association; in particular, they made it very easy to include its seal, both in black-and-white and in color, at the top of pages.

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## Copyright notice

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This document has been produced by feeding to a  $\text{\LaTeX}$  typesetting engine the file `cdpbund1.dtx` version 0.36 (2015/02/08). This file is part of a work named “C.D.P. Bundle”.

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`http://www.latex-project.org/lppl.txt`

and version 1.3 or later is part of all distributions of  $\text{\LaTeX}$  version 2005/12/01 or later.

The C.D.P. Bundle has the LPPL maintenance status “author-maintained”.

The file `manifest.txt` included in the C.D.P. Bundle specifies what the C.D.P. Bundle consists of; more precisely, it explains how the locutions “Work” and “Compiled Work”, used in the  $\text{\LaTeX}$  Project Public License, are to be interpreted in the case of this work.

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Note, though, that distribution of this document alone is “distribution of only part of the Work” in the sense of the  $\text{\LaTeX}$  Project Public License, and should therefore be avoided: please distribute, in addition, the source file `cdpbund1.dtx` together with all other files listed in `manifest.txt`, as explained in the file `manifest.txt` itself and also in Subsection 3.1 on page 12, to which you are referred for more information.

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Please include the *exact* phrase C.D.P.␣Bundle in the *subject* of your message; otherwise, your message could be thrown away by a mail filter. In this regard, the weakness of the laws concerning the protection of privacy forces me to explicitly forbid the use of the above address for any kind of advertising, marketing, polling, or similar commercial or statistical contact.

## Introduction

The *Coordinamento dei Dottorandi e dei Dottori di Ricerca dell'Università di Padova* (henceforth simply referred to as “*Coordinamento*”) was a free association of Ph.D.’s and Ph.D. students who took their degree, or were studying for it, at the University of Padova (Padua), Italy. Discussing its precise nature is completely outside the scope of this document; the only thing that concerns us here is that it wrote letters of a somewhat “official” kind, which, for this reason, had to bear its letterhead on the top of their first page. The classes and packages herein described were used for preparing this kind of letters, automatically taking care of printing the letterhead; but besides this, they incorporated much more functionality than the standard `letter` L<sup>A</sup>T<sub>E</sub>X class, and it was precisely this additional functionality that proved useful also in more general contexts, thus determining the adoption of the C.D.P. Bundle in (certain niches of) the L<sup>A</sup>T<sub>E</sub>X community.

## Credits and disclaimer

The `letteracdp` document class was originally based on the `letter` standard L<sup>A</sup>T<sub>E</sub>X class. During the time, it went through so many deep revisions, that by now it retains practically no relation with the original `letter` class; but we want to acknowledge the “historical” source anyway. The `articoletteracdp` document class uses some ideas borrowed from the `article` standard L<sup>A</sup>T<sub>E</sub>X class.

The author thanks heartfully Alessandro Ambrosi and Roberto Strepparava, who tested the software and constantly stimulated improvements and refinements, and Paolo Cojazzi, who, besides this, also helped with the compression tools.

As usual with computer software, no warranty is given that this code will work properly, or even that it will work at all. Using this code can even result in loss of data and/or damages to your disks and your storage media. If you use this code, you do so exclusively at your own risk!

See Subsection 3.1 and the L<sup>A</sup>T<sub>E</sub>X Project Public License for more information.

## About this document

This document, like many documentation files distributed for L<sup>A</sup>T<sub>E</sub>X, is divided into two parts.

The first part, *User’s Manual*, should contain all the documentation you need to successfully *use* the classes and packages that this document presents; but unfortunately (for you!), this document is still unfinished, so this information is *not* given here; instead, you are referred to some other sources (all available through the world-wide web). The only pieces of information you will find in this part are how to install those classes and packages and how to generate this documentation. This part, however, specifies to what extent, and under what conditions, you are allowed to use and distribute the classes and packages presented in this document.

The second part, *Implementation*, can be omitted if you want (explanations on how to omit it are given at the beginning of the part itself), and contains information that concerns only “hackers” who want to learn how the macros that this document presents are *implemented*. Actually, this part contains the complete listing of the L<sup>A</sup>T<sub>E</sub>X code that implements the macros—unfortunately, almost without comments—in the usual `DocStrip` format; if you are not a L<sup>A</sup>T<sub>E</sub>X hacker, this part will not mean anything to you.

## About this release: a provisional patch

The C.D.P. Bundle was essentially written between 1999 and 2000 (for an Italian audience), and even at that time it contained code that was already deprecated; even worse, its design was flawed since the beginning, because it had been conceived for a specific and limited application (the letters of the C.D.P., exactly), and was adapted for more general use only as an afterthought.

A thorough redesign would therefore be needed; on the other hand, some users have suggested, or asked for, improvements and additions, in particular for what concerns the use of the bundle with other languages besides Italian, that can be implemented rather easily by means of provisional patches. I have already been deferring the introduction of these comparatively harmless enhancements for five years, waiting for the right moment to undertake the task of redesigning the bundle from scratch, but now I have resolved to simply patch up the existing version.

The macros presented in this document, therefore, are far from being optimal: no serious attempt has been made to remove “fossil” code, nor to bring it up to date with modern L<sup>A</sup>T<sub>E</sub>X usage. The only exception to this is a small change that has been made to the fonts used to print the letterhead of the *Coordinamento*, switching them from OT1 encoding to T1—because this just required hitting the  $\langle DEL \rangle$  key half a dozen of times! ;-). Of course, nobody will care about this, since the least likely reason for which you might want to use the C.D.P. Bundle is to produce that letterhead. For this same motive, essentially, I have also removed the `adiseal` package and the `lettcdpadi` document class, of which, probably, nobody besides me even remembers the purpose.

\*\*\* WOW!! \*\*\*

Though, **good news** are coming for all those users who asked for a means to **customize the letterhead** produced by the C.D.P. Bundle: a reasonably viable method for doing so has been provided at last! :-D The method requires the use of the `cdpaddon` package, passing in the new option `customletterhead`. You specify the contents of your custom head and foot by means of two new environments, called `customletterhead` and `customletterfoot`, respectively, which are similar, to a certain extent, to the `minipage` environment. This should give you maximum freedom in designing the letterhead, whilst adopting an interface you are surely well familiar with. See Subsection 3.3 for more information.

Another nifty feature is the ability to draw a thin rule to guide your hand in signing your letters: you ask for this behavior by passing the new `signaturerule` option to the `letteracdp` document class. See Subsection 3.2 for more information.

Sorry, but for now I cannot offer any more.

# Part I

## User's Manual

### 1 About this part

We shall only give instructions on how to install the bundle and how to generate this documentation; partial instructions on how to use the classes and packages contained in the bundle can be found in several documents written by the author [2, 3, 4, 5, 6, 7, 8, 9, 10], but a systematic user's manual is no longer foreseen. :-( Note that including in this document the instructions on how to generate the document itself may seem pretty useless, but actually isn't: you might be reading a copy obtained from another person.

### 2 Installing the C.D.P. Bundle and generating this documentation

As usual for L<sup>A</sup>T<sub>E</sub>X distributions, the C.D.P. Bundle is distributed in the form of a .dtx file, namely `cdpbundl.dtx`, and an accompanying .ins file, namely `cdpbundl.ins`.

#### 2.1 Installation

To install the bundle, run L<sup>A</sup>T<sub>E</sub>X (or Plain T<sub>E</sub>X) once on the file `cdpbundl.ins`. This will generate the following L<sup>A</sup>T<sub>E</sub>X input files:

```
articoletteracdpc.cls
cdpaddon.sty
cdpbabel.sty
cdpnamesenglish.ldf
cdpnamesitalian.ldf
cdpshues-example.def
cdpshues.cfg
epson-stylus-740.def
hp-laserjet-4500.def
letteracdpc.cls
```

To finish the installation, move them into a L<sup>A</sup>T<sub>E</sub>X input directory. (If you want, you can discard one, more, or all of the files whose name ends in `.def`, each of which contains color definitions for the seal appropriate for a particular printer. See Subsection 2.2 for information about how these files are used for this purpose.) The above listing of all the files you need to move is also displayed on the terminal at the end of the run of the file `cdpbundl.ins`. The documentation of your T<sub>E</sub>X installation should tell you how to find the L<sup>A</sup>T<sub>E</sub>X input directory/ies, and probably also how to create new L<sup>A</sup>T<sub>E</sub>X input directories reserved to hold your private classes and packages.

Note that the TDS-compliant directory where the above files should be put is

```
tex/latex/cdpbundl/
```

## 2.2 Configuring the `cdpaddon` package

The `cdpaddon` package is the part of the C.D.P. Bundle that takes care of coloring the C.D.P. seal, which appears in black-and-white if you don't load this package. Experience by trial and error has shown that some configuration work may be necessary in order to obtain (more or less) correctly-looking colors in the seal. This happens because different printers may render color hues in different ways, sometimes producing surprising results.

The configuration mechanism works as follows. For each printer you plan to use there should be a definition file that specifies what hues should be used to color the C.D.P. seal. To select which file to load, the user indicates its name in an option passed to the `cdpaddon` package. If the user gives no such indication, the package reads from a configuration file the name of the default definition file, and uses that file. In both cases, if the designated definition file cannot be read, the package issues a warning and resorts, for the hues, to an emergency definition (which, as you can expect, is not very pleasant to the eye).

### 2.2.1 Writing color definition files

The task of a color definition file is simply to define two colors called `slight@col` and `strong@col` (when the definition file is read, the `@` characters are treated as ordinary letters): `slight@col` is the color used to paint the inner of the D and of the P in the seal, `strong@col` is the color used to draw the lines. You define these colors by means of the `\definecolor` command: see the *L<sup>A</sup>T<sub>E</sub>X*book [1, Section 7.3 and Subsection C.14.3] for information on colors and the `\definecolor` command.

The file `cdpshues-example.def`, too, contains comments which explain how to write new definition files for the `cdpaddon` package. Indeed, this file is supplied only as a prototype: I suggest that you write a new file by making a copy of it (with the appropriate name) and modifying it with the help of the comments. The colors defined in this file are just an example, and indeed they are exactly the emergency colors used internally by the `cdpaddon` package when it cannot load a definition file—that is, a completely useless definition!

The file `cdpshues-example.def` uses the `named` color model, but of course you can use any color model you want. Indeed, it is best to use “direct” color models like `rgb` or `cmymk`, that allow you to drive the printer with precision: after all, it is exactly for this purpose that you are writing the file. The other two definition files included in the C.D.P. Bundle illustrate the use of these color models.

### 2.2.2 Selecting a color definition file via an option

The first way to select a particular color definition file among the ones you have installed is to pass a suitable option to the `cdpaddon` package. More precisely, the option name has the form `printer:<bare file name>`, all in a row without intervening spaces, where `<bare file name>` is the name of the definition file you want to load *without* the extension `.def`. For example, to load a file called `acme-wilejet.def`, you pass the option `printer:acme-wilejet`. Explicitly, you would write

```
\usepackage[printer:acme-wilejet]{cdpaddon}
```

to load the `cdpaddon` package and the color definitions suitable for the ACME WileJet printer (the printer preferred by 8 coyotes out of 10). Similarly, to load

the file `cdpshues-example.def` you would write

```
\usepackage[printer:cdpshues-example]{cdpaddon}
```

and so on. Of course, you can still specify, as well, the other options listed in [8]: for instance,

```
\usepackage[hypertext,printer:acme-wilejet]{cdpaddon}
```

activates the hyperlinks and selects the colors for the ACME WileJet printer.

When no `printer:...` option is specified, a default definition file is loaded, as explained in the next section. For elegance, you can explicitly request this default definition file with the `printer:Default` option (note the capitalization). Of course, this implies that you cannot have a definition file called `Default.def`; but `default.def` is absolutely OK, and you can select it with `printer:default`. Moreover, the `printer:None` option forces the `cdpaddon` package to ignore the configuration file and to use the emergency, built-in colors; again, `printer:none`, instead, tries to load a color definition file called `none.def`.

### 2.2.3 Declaring the default color definition file

Most users will have only one printer, and even those users who have access to several printers will use one of them more often than the others. Therefore, it is wise to have a second way of selecting a definition file, to be used when the user does not specify one. This is done by indicating in a configuration file the name of a default color definition file. This configuration file is called `cdpshues.cfg`.

The `cdpshues.cfg` file should contain only zero or one (but preferably one!) `\DeclareCDPSealHuesDefault` command. This command may be used only here, and only once, since it deactivates itself when executed, and also stops L<sup>A</sup>T<sub>E</sub>X from reading any further in the configuration file. In its unique (mandatory) argument, one puts the name, *without* the extension `.def`, of the default color definition file. Do not include any other command in your configuration file, because the effect of any other command is undefined.

The `cdpshues.cfg` file included in the C.D.P. Bundle contains comments that help you to modify it in order to declare your personal default color definition file. The recommended way of doing this is:

- 1) make a backup copy (good idea indeed!) of the original configuration file under a convenient name, for example `cdpshues.cfg.original`;
- 2) modify the `cdpshues.cfg` file following the advice given in its comments;
- 3) if you want, delete all comments from the (new version of the) `cdpshues.cfg` file, to save disk space.

The obsolete version of the `cdpaddon` package documented in [8] was not configurable: it was programmed to read the color definitions from a file called `cdpshues.def`, and this name was hard-coded in the package. To maintain compatibility with this version, the file `cdpshues.cfg` included in the C.D.P. Bundle designates as the default color definition file exactly a file named `cdpshues.def`. Consequently, if you install the supplied files without making any change to them, the `cdpaddon` package will continue to exhibit the old behavior, reading the legacy `cdpshues.def` file if you have one installed, and adopting the emergency colors otherwise. Note that no actual `cdpshues.def` file is included in the C.D.P. Bundle.



## 2.3 Defining the captions for unsupported languages

Like many other document classes and packages, the classes and packages of the C.D.P. Bundle mark up some portions of the output they produce by adding certain descriptive strings, that, by default, are written in Italian. For example, when you have requested the `headings` page style, the name of the addressee, which is printed atop pages, is preceded by the string “A:” (= “To:”); similarly, when you issue the command `\tableofcontents` in a documents that adopts the `articoletteracdp` document class, the table it produces is titled “*Sommario*” (= “Contents”); and so on.

When the C.D.P. Bundle was used only by the members of the *Coordinamento*, the Italian defaults it provided for those captions were, of course, quite adequate; as long as its use remained circumscribed to the Italian L<sup>A</sup>T<sub>E</sub>X community, they were still acceptable; but now, questions about how to adapt the C.D.P. Bundle to foreign languages have begun to be asked in some Internet forums by users around the world, pushing me to reconsider the matter.

Of course, the Italian captions are not (nor they have ever been) “hard-wired” in the code: they are defined by macros that follow the usual naming conventions (`\headtoname`, `\contentsname`, and so on). Thus, it’s only a matter of redefining these “hooks” to suit the target language. However, it would be desirable to have some standard definitions set for each language; but unfortunately, this cannot be attained just by loading the `babel` package, for two reasons. In the first place, there are some captions that are specific to the C.D.P. Bundle and are therefore not cared for by the `babel` package: for example, the (optional) subject of a letter is preceded by the expansion of `\subjectname` (which is “*Oggetto:*” in Italian and should be “Subject:” in English), a hook the `babel` package knows nothing about. Secondly, even for those hooks that are standard, sometimes the definition provided by the `babel` package seems (at least to me) not adequate for a letter; in particular, alas, if you load `babel` with the `italian` option (as you ordinarily do when you are writing in Italian), it actually *cancels* the definitions preset by the C.D.P. Bundle, substituting for them strings that I deem more suitable for articles or books, for which they are indeed intended, than for letters (for example, `\contentsname` → “*Indice*” in `babel`, instead of `\contentsname` → “*Sommario*”, as defined by the C.D.P. Bundle; `\refname` → “*Riferimenti bibliografici*” in `babel`, instead of `\refname` → “*Testi citati*”, as I prefer; etc.).<sup>1</sup>

To supply a *provisional* solution to this problem, a new component has been added to the C.D.P. Bundle: the `cdpbabel` package. The idea is that, when using one of the document classes of the C.D.P. Bundle, you load the `cdpbabel` package *instead of* `babel`, and let the former load the latter on your behalf; in this way, you offer it a chance to augment, or amend, the definitions made by `babel` itself. This solution might seem inelegant (and admittedly it is), but the problem is more subtle than it may look at first sight, involving also compatibility issues with existing documents, and I need to further investigate it. Hopefully, a more satisfactory scheme will be found for future releases.<sup>2</sup>

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<sup>1</sup>I do not insist on these captions being defined in the way the C.D.P. Bundle currently uses: if the L<sup>A</sup>T<sub>E</sub>X community thinks that such definitions are inadequate, I have no objection at all, of course, to changing them.

<sup>2</sup>More generally, it can be observed that the document classes of the C.D.P. Bundle rely too heavily on ancillary packages, and that this reconfirms the “patched-up” nature of their design; just think of the entanglement between the `letteracdp` class and the `cdpaddon` package—a typical Italian *pasticcio*, it should be admitted!

```

\ProvidesFile{cdpnames<language>.ldf}[\date & version]

\def\@cdpbabel@letter@names{%
  \def\subjectname      {\langle Subject:\rangle}%
  \def\registeredname    {\langle Registered\rangle}%
  \def\registeredRRname  {\langle Registered R.R.\rangle}%
  \def\andccname         {\langle cc (in addresses)\rangle}%
  \def\ccname            {\langle cc (at end of letters)\rangle}%
  \def\enclname          {\langle Encl:\rangle}%
  \def\PSname            {\langle P.S.:\rangle}%
  \def\headtoname        {\langle To:\rangle}%
  \def\lettername        {\langle Letter\rangle}%
  % More captions could be added in the future.
}
\def\@cdpbabel@artlet@names{%
  \def\contentsname      {\langle Contents\rangle}%
  \def\listfigurename    {\langle List of figures\rangle}%
  \def\listtablename     {\langle List of tables\rangle}%
  \def\refname           {\langle References\rangle}%
  \def\indexname         {\langle Index\rangle}%
  \def\figurename        {\langle Figure\rangle}%
  \def\tablename         {\langle Table\rangle}%
  % More captions could be added in the future.
}

\endinput

```

Figure 1: Contents of a `cdpnames<language>.ldf` file

In practice, all the `cdpbabel` package has to do is (to load `babel` and) to issue an `\addto{\captions<language>}{...}` command (or better, one such command for each required `<language>`), with “...” replaced by the appropriate redefinitions; the list, and the details, of such redefinitions are of course dictated by `<language>`, so `cdpbabel` takes them from what we will call a “C.D.P. language definition file”. This is a text file that, by convention, must be named `cdpnames<language>.ldf`, where `<language>` is the name of the corresponding language option (for example,

```
\usepackage[english,italian]{cdpbabel}
```

invokes both `cdpnamesenglish.ldf` and `cdpnamesitalian.ldf`, in this order), and which must adhere to the format shown in fig. 1.

As you can see, a “C.D.P. language definition file” must define two macros, named `\@cdpbabel@letter@names` and `\@cdpbabel@artlet@names`, respectively: in the first you put the redefinitions that should be added to `\captions<language>` when only the `letteracdp` class has been loaded; in the second you list the additional redefinitions that apply if the `articoletteracdp` class is loaded too; and that’s all. The listing shown in fig. 1 details exactly what hooks need to be redefined when switching to another language; in principle, you must supply a suitable redefinition for each of them, but of course, when a hook is already defined by the `babel` package in a way that you think suits, you may omit it from your list (or, perhaps better, comment it out). Look at the two provided files for inspiration, and in particular at `cdpnamesenglish.ldf` for the intended meaning of the captions (which could be quite obvious, however).

At present, the C.D.P. Bundle ships with *just two* such definition files included, namely `cdpnamesitalian.ldf` for Italian and `cdpnamesenglish.ldf` for English: for all other languages, you'll have to write and install appropriate files yourself. Needless to say, you are most welcome if, after doing so, you want to contribute your work for inclusion in future releases of the C.D.P. Bundle. Suggestions for amending the captions specified in the two existing files are most welcome too; for Italian, it is also a matter of updating the captions originally defined by the `letteracdp` and `articoletteracdp` document classes so that they remain “in sync” with those specified in the `cdpnamesitalian.ldf` file.

It is hardly worth remarking that “C.D.P. language definition files” naturally belong to the same directory where the C.D.P. Bundle is located, and *not* to any directory of the `babel` system!

One final word of clarification: two of the abovementioned captions, namely `\ccname` and `\andccname`, look like they are the same, but they actually differ: the latter is prepended to *addresses* to which the letter is sent as a “carbon copy”, whilst the former is used when the names from those addresses are enumerated again *at the end* of a letter (in the same place where enclosures are also listed). In Italian, `\andccname` should expand to “*e p. c.*”, but `\ccname` just to “*P. c.*”; hence, there is at least one language in which the distinction is relevant.

## 2.4 Documentation

To produce this documentation, run  $\LaTeX$  three times (for the table of contents to be correct) on the file `cdpbundl.dtx`. This won't produce the index and the change history, however: for those, you have to run `MakeIndex` on the files `cdpbundl.idx` and `cdpbundl.glo`, produced during the previous  $\LaTeX$  run, with the styles `gind.ist` and `gglo.ist`, respectively (these styles are part of the standard  $\LaTeX$  distribution); then pass `cdpbundl.dtx` through  $\LaTeX$  twice more.

Starting with version 0.36 of the C.D.P. Bundle, a (quite trivial!) makefile that “knows” how to produce the documentation is offered along with the Bundle itself. Although it is not a required part of the distribution (as per LPPL), you may find that some distributors supply it all the same (I hope the CTAN sites will do so). With this makefile in the same directory as `cdpbundl.dtx`, the shell command

```
make doc
```

will take all the necessary actions to produce the full documentation (in PDF; the modifications you need to introduce into the makefile in order to obtain DVI output should be quite obvious, however).

The same makefile can also be used to extract the various class, package, and ancillary (definition and configuration) files: simply issue the command

```
make code
```

at the shell prompt; whereas

```
make
```

will *both* extract the code files *and* typeset the documentation. Type

```
make help
```

for more information.

### 3 How to use the C.D.P. Bundle

The C.D.P. Bundle v. 0.36 contains two  $\text{\LaTeX}$  document classes, namely `letteracdp` and `articoletteracdp`, and two helper  $\text{\LaTeX}$  packages, called `cdpaddon` and `cdpbabel`, plus a certain number of definition and configuration files related to these packages. As already said, the actual purpose of this section is not to explain you how to use these macro files, but only to give you references to documents where you can find the explanations.

For instructions on how to use the `letteracdp` class the reader is referred to [2, 3, 4, 6, 7, 9]. Note, however, that the class is syntactically compatible with the `letter` standard  $\text{\LaTeX}$  class, in the sense that a document prepared for the `letter` class can be compiled without errors with the `letteracdp` class; but the output will be different.

As a minimal reference, fig. 2 illustrates the typical structure of a simple input file for the `letteracdp` document class.

For instructions on how to use the `articoletteracdp` class, see [5].

For instructions on how to use the `cdpaddon` package, see [8]. Note, however, that this document describes an obsolete version, which lacks the ability to deal with several color definition files. The use of the `cdpaddon` package for customizing the letterhead, though, is covered in [10].

For instructions on how to use the `cdpbabel` package, see [10].

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##### 3.1.2 Use

The use of the C.D.P. Bundle is unrestricted, provided that you accept the terms and conditions of the  $\text{\LaTeX}$  Project Public License and of the following subsection for what concerns the absence of any warranty.

```

\documentclass[boldsubject,italicsignature,smartindent]{letteracdp}
% Of course, the above options are a matter of personal taste...
\usepackage[T1]{fontenc} % as it is now customary
% Since we are writing in English, we need to redefine some captions;
% the following package automatically takes care of this:
\usepackage[english]{cdpbabel}
% Presently only two languages are supported: "english" and "italian".

% Name, address and signature of the sender (the name is optional):
\name{Revinu Jitis Drofnats}
\address{
  Revinu~J. \textsc{Drofnats}\\
  Department of Farm Ecology\\
  University of St.\,Anford\\
  Haga Alto, CA~94321 (U.S.A.)
}
\signature{R.~J. Drofnats\\Professor}
\date{February~8, 2015} % as usual, date is optional, default is \today
\place{St.\,Anford} % place where the letter is written (optional)

% Uncomment the following declaration if you want running heads:
% \pagestyle{headings}

\begin{document}

\begin{letterhead}[Brian~K. Reid]{
  Prof.~Brian~K. \textsc{Reid}\\
  Department of Electrical Engineering\\
  Stanford University\\
  Stanford, CA~94305 (U.S.A.)
}
[
  This is the optional subject of the letter.
]

\opening{Dear Prof.~Reid,}

this letter is typeset using a \texttt{letterhead} environment, so it
will be printed with the letterhead of the \emph{Coordinamento} above
it; if you don't want it, use the \texttt{letter} environment instead.
You can also use the \texttt{foldedletterhead} environment in place
of the \texttt{letterhead} environment (or \texttt{foldedletter} in
place of \texttt{letter}) to obtain a letter prepared to be folded in
three parts, as one usually does before putting it in an envelope.
Experiment to see what happens.

\closing{Sincerely,}

\end{letterhead}

\end{document}

```

Figure 2: A sample input file for the letteracdp document class

### 3.1.3 No warranty

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## 3.2 Options of the letteracdp class

Of course, you load the `letteracdp` class by means of the usual `\documentclass` declaration, which allows you to specify various options. For some reason, the complete list of all the options recognized by this class has never been given in any of the previous documents containing instructions about it; so, we give it here.

We shall now list all the options recognized by the `letteracdp` class, including the standard ones it can understand. If an option does not appear in the list given below, then that option is not recognized by the `letteracdp` class, even if it is a standard one (that is, documented in the *L<sup>A</sup>T<sub>E</sub>Xbook* [1]).

We begin with the list of standard options. Since they are already described in the *L<sup>A</sup>T<sub>E</sub>Xbook* [1], we describe only the options that behave differently from the standard; the others are just listed without description.

`10pt` | `11pt` | `12pt`

`letterpaper` | `legalpaper` | `executivepaper` | `a4paper` | `a5paper` | `b5paper`

Note that `letteracdp` uses `a4paper` as the default.

`landscape`

`final` | `draft`

`oneside` | `twoside`

`onecolumn` | `twocolumn` The `twocolumn` option is recognized, but triggers an error; the `onecolumn` option is recognized, but it is ignored because in any case the document is typeset in one-column mode. Note, however, that requesting `onecolumn` as a global option could make sense: precisely, it could serve to inform possible packages that the document has only one column. But, precisely for this reason, this option is requested by default during the class initialization; there is hence no reason to specify it, but it does no harm.

`leqn`

`fleqn`

We now list the option specific to the `letteracdp` class.

`mediumsubject` | `boldsubject` The `mediumsubject` option requests that the subject of the letters be typeset in medium weight, while the `boldsubject` option makes it appear in boldface type. The default is `mediumsubject`.

`uprightsignature` | `italicsignature` The `uprightsignature` option requests that the signature of the letters be typeset in upright shape, while the `italicsignature` option makes it appear in italic shape. The default is `uprightsignature`.

`signaturerule` | `nosignaturerule` Drawing or not a thin rule to mark the spot where you should sign a letter is a matter of style that, as such, should apply to the whole document; for this reason, this behavior is requested by means of an option, namely `signaturerule`. As you can guess, `signaturerule` causes the rule to be drawn, while `nosignaturerule`, which is defined for the sake of completeness, suppresses it. Anyway, the rule is never drawn inside a `signatureenv*` environment; this includes signatures generated by the `*`-form of the `\closing` command. You can adjust the width of the rule by modifying, with `\setlength`, the `\signaturerulewidth` rigid length.

`noPS` | `usePS` These two options are obsolete (to say the least!) and should *not* be used any longer. If you want to improve the graphical quality of the seal, simply load the `pict2e` package in your document, along with the `cdpaddon` package (of course, if you do so, PostScript or PDF printing will be needed to produce the output).

`indent` | `noindent` | `smartindent` | `shortindent` These options are used to specify the paragraph indentation, but only for letters; any portion of text that is not included in a letter—but normally there is no such text—is not affected by these options. The `indent` option sets the paragraph indentation, for letters, to one tenth of the text width, unless this amount looks too bad, in which case the indentation is set to 2 picas. The `noindent` option completely suppresses paragraph indentation within letters. The `smartindent` option sets the paragraph indentation, for letters, to the width of (the last line of) the salutation, unless this amount looks too bad, in which case it behaves like `indent`. The `shortindent` option maintains also for letters the same indentation used for text not included in letters (see below); its name, chosen to be more easily remembered, is due to the fact that normally it involves a shorter indentation than the default one. The default is `indent`. I repeat that these options do not affect any text that should appear outside of letters, whose paragraphs will be always indented by 2 em, where the unit of 1 em is taken from the main document font; this is also the paragraph indentation for letters if the `shortindent` option is specified. Paragraphs of postscripts are never indented.

`105x37labels` | `70x37labels` | `Avery5352labels` These options indicate the format of the address labels. The first two options indicate address labels of mm  $105 \times 37$  and mm  $70 \times 37$ , respectively. The third option indicates the address labels used by the standard `letter` class. Note the uppercase letter in `Avery5352labels`. The default is `105x37labels`.

### 3.3 Customizing the letterhead

A new, long-awaited feature is available at last: it is now possible, with reasonable ease, to customize the letterhead produced by the `letterhead` environment. :-D As a matter of fact, this customization has always been possible—the `letterhead` environment would have been completely useless otherwise—but instructions on how to carry it out were given uniquely in documents that were only privately circulated; moreover, these instructions required you to modify some of the internal commands of the C.D.P. Bundle. What the present version does is to provide a reasonable user interface for making these internal changes and (which is not less important) to document this interface.

The customization of the letterhead basically involves the following three steps:

1. First of all, you need to load the `cdpaddon` package, which is part of the C.D.P. Bundle, passing to it the (new) option `customletterhead`.
2. The `cdpaddon` package defines two environments, named `customletterhead` and `customletterfoot`, respectively, that can be used more or less like a `minipage` environment. You should put, in any place before the first letter (not entirely exact, but almost so: we'll refine this information underneath), a `customletterhead` environment holding the description of your letterhead. Just pretend you are composing a `minipage` with your letterhead inside.
3. If you also want to customize the page footer (as it is ordinarily the case), define its contents inside a similarly placed `customletterfoot` environment. If you omit this step, the footer will be empty.

`customletterhead`      More formally, the `cdpaddon` package makes two new environments available,  
`customletterfoot`    named as stated above, that conform to the following syntax:

```
\begin{customletterhead}{\langle width \rangle}    \langle text \rangle    \end{customletterhead}
\begin{customletterfoot}{\langle width \rangle}   \langle text \rangle   \end{customletterfoot}
```

Both these environments typeset  $\langle text \rangle$  in a `minipage` with width  $\langle width \rangle$  and save the result in a box register specifically reserved for this purpose (each environment has its own, dedicated register); subsequently, if the `customletterhead` option has been specified, the contents of these box registers are used in place of the header and footer ordinarily defined by the `letteracdp` document class. Note that the `cdpaddon` package defines the `customletterhead` and `customletterfoot` environments in any case, *independently* of which options you pass to it.

The contents specified inside `customletterhead` and `customletterfoot` will be horizontally centered in the header and footer boxes, respectively; these boxes are defined by the page layout, but normally their left and right edges coincide with those of the main text. If the  $\langle width \rangle$  you have specified for the contents themselves exceeds the width available in the header/footer, they will stick out by the same amount of space on both sides (in brief: the contents are centered with `\hss` at both ends). Normally, you pass `\textwidth` as the  $\langle width \rangle$  parameter<sup>3</sup> and align things as you prefer *inside* the `minipage`, perhaps creating sub-boxes or using `pictures`.

---

<sup>3</sup>I have long been in doubt whether to make  $\langle width \rangle$  an optional parameter, with default value equal to `\textwidth`; eventually, I decided for a syntax that parallels the syntax of the `minipage` environment, and should therefore be obvious to remember.



Coming to vertical alignment, the boxes produced by the `customletterhead/`  
`customletterfoot` environments are “smashed” down to null height and depth; for `customletterhead`, the bottom edge of the box is aligned with the baseline of the header, whilst for `customletterfoot` it is the top edge which is aligned with the baseline of the footer. If you want the contents of `customletterhead` to sink below the baseline of the header, simply backspace vertically at their end, *i.e.*, use `\vspace{<dist>}` with a negative  $\langle dist \rangle$ , and the bottom edge of your custom header will be placed exactly  $|\langle dist \rangle|$  below the baseline of the header as defined by the general page layout. Similarly, a `\vspace{<dist>}` with a negative  $\langle dist \rangle$  placed at the beginning of your custom footer will rise its top edge exactly  $|\langle dist \rangle|$  above the baseline of the footer defined by the general page layout.

Fig. 3 shows a sample input file for a letter with customized letterhead. Note that, among the others, we load the `cdpaddon` package with the `customletterhead` option. Note also that the `customletterhead/customletterfoot` environments *can* be placed in the preamble; this makes it very easy to create a definition file containing the description of your custom letterhead, to be subsequently loaded in your source files, or even to define your custom version of the `letteracdp` and `articoletteracdp` document classes. For example, the three files `myletter.cls`, `myarticletter.cls`, and `mylogo.def`, whose contents are listed in fig. 4, 5, and 6, respectively, together define two new classes, called `myletter` and `myarticletter`, that respectively parallel `letteracdp` and `articoletteracdp`, but produce the same letterhead as the file of fig. 3.

One final word: the `customletterhead/customletterfoot` environments save their contents in their respective box registers by means of a *local* assignment, subject to ordinary scoping rules: this can be useful if you want to change the letterhead for just a single letter in a source file that contains many ones.

See [10] for more information.

```

\documentclass
  [twoside,boldsubject,italicsignature,shortindent,signaturerule]
  {letteracdp}[2015/01/20]
\usepackage[T1]{fontenc}
\usepackage[english]{cdpbabel}
\usepackage[customletterhead]{cdpaddon}[2015/01/21]
\usepackage{url,lipsum}

\address{
  Gustavo \textsc{Mezzetti}\\
  \protect\url{gustavo.mezzetti@istruzione.it}
}
\signature{Gustavo Mezzetti}
\date{February~8, 2015}
\place{Padova}

% Definition of your letterhead occurs here:

\begin{customletterhead}{\textwidth}
  \centering \Huge
  My Huge Centered Letterhead
\end{customletterhead}
\begin{customletterfoot}{\textwidth}
  \raggedleft \tiny
  \ruleacrossheadorfoot
  My (almost unreadable) small print\\
  flushed against the right margin.
\end{customletterfoot}

\begin{document}

\begin{foldedletterhead}[Whom it may concern]
  {To whom it may concern}
  [My own letterhead, at last!]

\makepresentation
\maketopdate\relax

\lipsum[1-2]

\makesignature

\end{foldedletterhead}

\end{document}

```

Figure 3: How to customize the letterhead

```

\NeedsTeXFormat{LaTeX2e} % LaTeX2e is required!
\ProvidesClass{myletter}
    [2015/02/08 v0.01 (development)]
\DeclareOption*{\PassOptionsToClass{\CurrentOption}{letteracdp}}
\ProcessOptions\relax
\LoadClass{letteracdp}[2015/01/20]
\input{mylogo.def}
\endinput

```

Figure 4: Contents of the myletter.cls file

```

\NeedsTeXFormat{LaTeX2e} % LaTeX2e is required!
\ProvidesClass{myarticletter}
    [2015/02/08 v0.01 (development)]
\DeclareOption*{\PassOptionsToClass{\CurrentOption}{articoletteracdp}}
\ProcessOptions\relax
\LoadClass{articoletteracdp}[2015/01/20]
\input{mylogo.def}
\endinput

```

Figure 5: Contents of the myarticletter.cls file

```

\ProvidesFile{mylogo.def}[2015/02/08 v0.01 (development)]

\RequirePackage[customletterhead]{cdpaddon}[2015/01/21]

\begin{customletterhead}{\textwidth}
    \centering \Huge
    My Huge Centered Letterhead
\end{customletterhead}
\begin{customletterfoot}{\textwidth}
    \raggedleft \tiny
    \ruleacrossheadorfoot
    My (almost unreadable) small print\\
    flushed against the right margin.
\end{customletterfoot}

\endinput

```

Figure 6: Contents of the mylogo.def file

## References

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## Change History

0.30	General: First release of the C.D.P. Bundle . . . . .	1
0.31	General: Added support for the <code>usePS</code> option in the <code>cdpaddon</code> package . . . . .	1
0.32	General: Removed support for the <code>usePS</code> option in the <code>cdpaddon</code> package . . . . .	1
0.33	General: Reorganized code of the <code>articoletteracdp</code> class and of the <code>cdpaddon</code> package to make it compatible with the <code>hyperref</code> package . . . . .	1
0.34	General: Added <code>\place</code> command . . . . .	1
	Corrected positioning of floats in float pages . . . . .	1
	Improved interaction with the <code>hyperref</code> package . . . . .	1
0.35	General: Never publicly released. Some of the changes listed below for vers. 0.36 were actually introduced in this version. . . . .	1
0.36	General: Added <code>cdpbabel</code> package and related language definition files for English and Italian. . . . .	1
	Added the <code>signaturerule</code> option, and its related stuff (the <code>\signaturerule</code> command, the <code>\signaturerulewidth</code> parameter), to support rules that mark where to sign by hand. . . . .	1
	Added <code>\ClosingSequence</code> command and related macros, in particular <code>\ChosenMakeClosing</code> and <code>\ChosenMakeSignature</code> . . . . .	1
	Added <code>\OpeningSequence</code> command and related macros, in part. the <code>\ChosenMakeOpening</code> hook. . . . .	1
	Delegated to a new command ( <code>\foldingtagrule</code> ) the task of drawing the sign that shows where the sheet is to be folded. . . . .	1
	Eventually added functionality to the <code>cdpaddon</code> package to support user-defined letterheads. . . . .	1
	Removed the <code>adiseal</code> package and the <code>lettcdpadi</code> document class. . . . .	1
	Tidied up in several points the code of the <code>cdpaddon</code> package. . . . .	1

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Numbers in italics refer to the page where the corresponding entry is described, the ones underlined to the code line of the definition, the rest to the code lines where the entry is used.

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