

Printing Envelopes and Labels in L^AT_EX 2_ε:
EnvLab Package.
User Guide*

Boris Veytsman

July 16, 1997

Abstract

This package provides a comprehensive and easily customizable system for creating mailing envelopes and labels in L^AT_EX 2_ε. Includes printing barcodes and address formatting according to the US Postal Service rules.

Contents

1	Introduction	1
2	Installation	2
3	Usage	3
3.1	The basics	3
3.2	Sizes of labels and envelopes	5
3.3	Printing details	8
3.4	Formatting of the address (barcodes and capitalization)	10
3.5	Printing of return addresses	12
3.6	Change of settings for some labels	12
3.7	Enhancements for the <code>letter</code> environment	12
4	Customization	14
5	Commands for <i>PostScript</i> printers	15
6	Bugs and limitations	17
7	Acknowledgements	17

*©Boris Veytsman, 1996, 1997

8	Legalese	17
	References	18

List of Figures

1	Automatic generation of envelopes	4
2	<i>EnvLab</i> and <i>mailing</i> package.	4
3	Manual generation of envelopes	5
4	Printing of return labels	5
5	Labels parameters	7
6	A wrong way to include subject information in the letter	13
7	The <i>EnvLab</i> way to include subject information in the letter	14

List of Tables

1	Differences between envelopes, labels and big labels	6
2	Standard envelope sizes	6
3	Standard label sizes	8
4	Standard big label sizes	8

1 Introduction

The standard `\makelabels` command in the L^AT_EX 2_ε `letter.cls` document class typesets labels on Avery 5352 sheets. A typical user may want more. *EnvLab* redefines `\makelabels` in¹ a more useful and customizable way. *EnvLab*:

- Typesets mailing labels or envelopes on a number of pre-defined label sheets *or* envelopes.
- Can be easily configured for any customized label or envelope sizes. The rule of thumb is: if you printer can print this, *EnvLab* can typeset this.
- Can optionally print barcodes and/or process addresses according to the United States Postal Service Rules.
- Allows you to include your logo in the return address.
- Painlessly interacts with mail merging packages such as `mailing`.
- Does not require special fonts for address and barcodes printing. The typesetting is implemented with standard fonts and L^AT_EX `\rule` commands.

¹hopefully

This package was written with US mailing standards in mind. This is not a reflection of the author's americanocentrism: US standard was only one I had official documents about. If you want to add your national standards, please contact me with pointers to the corresponding documents.

This document describes the basic usage of the package. More sophisticated users would want to typeset and browse `envlab.dtx` as well.

2 Installation

The distribution of this package includes the following files:

1. `envlab.dtx`—fully documented program,
2. `envlab.ins`—*DocStrip* instruction module,
3. `elold.ins`—*DocStrip* instruction module for older versions of *DocStrip*,
4. `elguide.tex` (this file)—User Guide,
5. `readme.version_number`—ReadMe file.

To install the package

1. L^AT_EX the file `envlab.ins`². It will produce three files: `envlab.drv`, `envlab.sty` and `envlab.cfg`.
2. (Optional) Look at the file `envlab.cfg` and change it accordingly to your taste (see Section 4).
3. Move the files `envlab.sty` and `envlab.cfg` to the L^AT_EX search path³
4. Produce the documentation by L^AT_EXing the files `elguide.tex` and (optional) `envlab.drv`.
5. Enjoy!

3 Usage

3.1 The basics

The package *EnvLab* is intended to be used with the L^AT_EX 2_ε `letter` document class and similar custom classes. The standard document class defines

²If your `docstrip.tex` is earlier than version 2.3, use `elold.ins` instead of `envlab.ins`.

³The users of kpathsea based T_EX—like t_EX—should also issue `texhash` to update the search database.

the environment `letter`, which, among other things, writes to the main `.aux` file the information about mailing address. *EnvLab* retrieves and typesets this information. In general one should not use *EnvLab* with document classes that do not provide this information. The package types an error message if it cannot find the `\makelabels` command in the class it is called from⁴.

There are three ways to use *EnvLab*:

3.1.1 Automatic generation of envelopes or labels

`\makelabels`

Put in the preamble of your document: `\usepackage[options]{envlab}` and `\makelabels`. The package will generate envelopes or labels at the end of your document, ready to be printed. An example of such usage is shown on Fig. 1.

An interesting extension of this method is the use of *EnvLab* with mail-merge packages. If such packages generate `letter` environments, then *EnvLab* will happily produce envelopes or labels for them. I tested *EnvLab* with the *mailing* package available at CTAN with excellent results. See an example on Fig. 2.

3.1.2 Manual generation of envelopes or labels

`\startlabels, \mlabel{from-address}{to-address}`

Sometimes you need to generate only mailing labels or envelopes, but not letters themselves. In this case prepare a separate document of `letter` document class. Put in the preamble of your document `\usepackage[options]{envlab}` and `\makelabels`, and in the body of your document the command `\startlabels`⁵, and commands `\mlabel{from-address}{to-address}` for each label you want to generate (see Fig. 3)

3.1.3 Printing of return labels

`\printreturnlabels{number}{text}`

Sometimes you need to print only return labels. To print `{number}` of labels with the `{text}` on each use the command `\printreturnlabels{number}{text}`. It is better to put it in a separate document (see Fig. 4).

⁴If you want to create a custom letter class to be used with *EnvLab*, take care to write commands `\startlabels` and `\mlabel{from-address}{to-address}` to the `.aux` file. Also define a `\makelabels` command. The latter can do anything—*EnvLab* will redefine it anyway, but the package needs to see `\makelabels` defined at the start up

⁵It sets up page parameters for envelopes and letters

```

\documentclass[12pt]{letter}

\usepackage[personalenvelope]{envlab}
\makelabels

\address{%
  Joe Casanova\\1 Lambda Street\\Anyplace, NY 12345}
\signature{Joe}

\begin{document}
\begin{letter}{%
  Mary McKeen\\2 Alpha Street\\Otherplace, NY 12346}
  \opening{Dear Mary:}
  I love only you
  \closing{With love,}
\end{letter}

\begin{letter}{%
  Lisa O'Hara\\2 Beta Street\\Anotherplace, NY 12347}
  \opening{Dear Lisa:}
  I love only you
  \closing{With love,}
\end{letter}
\end{document}

```

Figure 1: Automatic generation of envelopes

```

\documentclass[12pt]{letter}

\usepackage[avery5061label,alwaysbarcodes]{envlab}
\makelabels

\address{%
  Joe Casanova\\1 Lambda Street\\Anyplace, NY 12345}
\signature{Joe}

\usepackage{mailing}
\addressfile{lovers.dat}
\mailingtext{%
  I love only you
  \closing{With love,}}

\begin{document}
\makemailing
\end{document}

```

Figure 2: *EnvLab* and *mailing* package. The file `lovers.dat` contains the address data in the format described in the documentation for *mailing* package.

```

\documentclass[12pt]{letter}

\usepackage[businessenvelope]{envlab}
\makelabels

\begin{document}
\startlabels
\mlabel{%
  Joe Casanova\\1 Lambda Street\\Anyplace, NY 12345}{%
  Mary McKeen\\2 Alpha Street\\Otherplace, NY 12346}
\mlabel{%
  Joe Casanova\\1 Lambda Street\\Anyplace, NY 12345}{%
  Lisa O'Hara\\2 Beta Street\\Anotherplace, NY 12347}
\end{document}

```

Figure 3: Manual generation of envelopes

```

\documentclass[12pt]{letter}

\usepackage[avery5160label,noprintbarcodes,%
nocapaddress]{envlab}
\makelabels

\begin{document}
\printreturnlabels{180}{%
  Joe Casanova\\1 Lambda Street\\Anyplace, NY 12345}
\end{document}

```

Figure 4: Printing of return labels

Media	Number per page	Rotation	Return address
Envelopes	One	Settable	Yes
Labels	Several	Not rotated	No
Big Labels	Several	Not rotated	Yes

Table 1: Differences between envelopes, labels and big labels

Package option	Width	Height
businessenvelope	9.5''	4.125''
executiveenvelope	7.5''	3.875''
bookletenvelope	10.5''	7.5''
personalenvelope	6.5''	3.625''
c6envelope	162 mm	114 mm
c65envelope	224 mm	114 mm
c5envelope	229 mm	162 mm
dlenvelope	220 mm	110 mm

Table 2: Standard envelope sizes

3.2 Sizes of labels and envelopes

EnvLab package recognizes three kinds of media: envelopes, labels and “big labels”. Envelopes are printed one per physical page, they could be rotated (i. e. inserted in the printer sideways) and could carry both the shipping address and return address. Labels and big labels are peel-off labels that are printed several per physical page, they could not be rotated. The difference between labels and big labels is that labels have only shipping address while big labels have both return *and* shipping addresses. These differences are summarized in Table 1. The kind and the size of the media are set either by package options or by the corresponding commands.

New description
Version 1.2
New feature
Version 1.2

`businessenvelope, executiveenvelope, bookletenvelope, personalenvelope, c6envelope, c65envelope, c5envelope, dlenvelope`

EnvLab knows about a number of standard envelopes. The options listed in Table 2 are used to typeset the addresses for envelopes with the given width and height. For example, if you have $9.5'' \times 4.125''$ envelopes, use the command `\usepackage[businessenvelope]{envlab}`.

`\SetEnvelope[⟨top margin⟩]{width}{height}`

If your envelope is not listed in Table 2, put in the preamble of your document

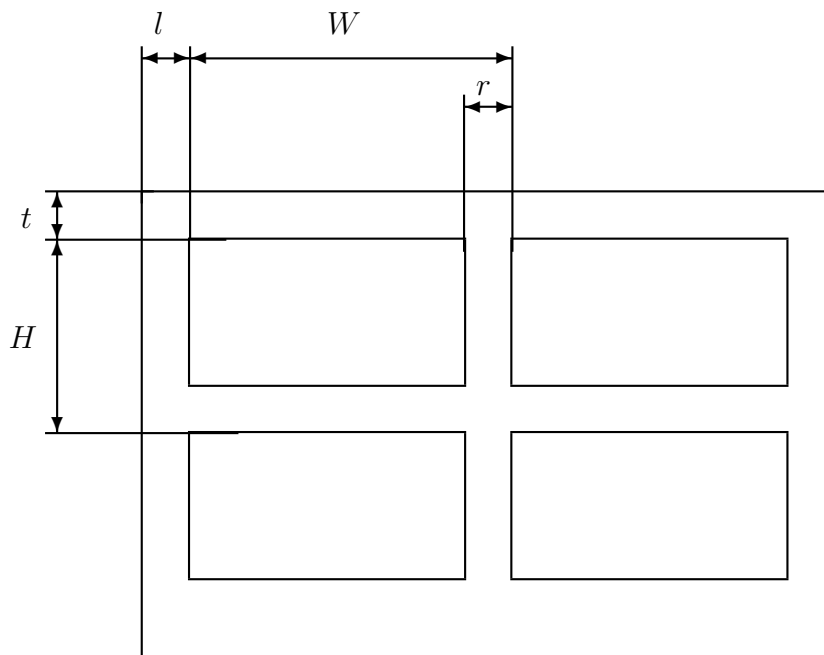


Figure 5: Labels parameters

the command `\SetEnvelope{width}{height}`⁶. Its arguments are dimensions of your envelope (together with the units!). For example, if you have $8'' \times 4''$ envelopes, use the command `\SetEnvelope{8in}{4in}`.

`avery5160label, avery5161label, avery5162label, avery5163label,`
`avery5164label, avery5262label, herma4625label`

EnvLab knows also about a number of commercially available labels. They are listed in Table 3. The dimensions W and H are the label total width and height, t and l are the distance between the edge of the paper and the label (see Fig. 5). The numbers N_c and N_r are correspondingly the numbers of columns and rows of labels on a sheet.

`\SetLabel{W}{H}{t}{l}{r}{N_c}{N_r}`

If your label size is not listed in Table 3, put in the preamble of your document the command `\SetLabel{W}{H}{t}{l}{r}{N_c}{N_r}`. This command is completely analogous to the command `\SetEnvelope` described above.

⁶The optional first argument of this command is described in Section 3.3

Package option	W	H	t	l	r	N_c	N_r
avery5160label	2.75''	1''	0.5''	0.19''	0.12''	3	10
avery5161label	4.19''	1''	0.5''	0.16''	0.19''	2	10
avery5162label	4.19''	1.33''	0.83''	0.16''	0.19''	2	7
avery5163label	4.19''	2''	0.5''	0.16''	0.19''	2	5
avery5164label	4.19''	3.33''	0.5''	0.16''	0.19''	2	3
avery5262label	110 mm	34 mm	21 mm	4 mm	5 mm	2	7
herma4625label	105 mm	42.3 mm	0 mm	5 mm	5 mm	2	7

Table 3: Standard label sizes

Package option	W	H	t	l	r	N_c	N_r
avery5163biglabel	4.19''	2''	0.5''	0.16''	0.19''	2	5
avery5164biglabel	4.19''	3.33''	0.5''	0.16''	0.19''	2	3

Table 4: Standard big label sizes

`avery5163biglabel, avery5164biglabel`

“Big labels” are big enough to carry both shipping and return addresses, otherwise their dimensions are completely analogous to the ones of labels. The predefined big labels are listed in Table 4. Note the difference between package options, say, `avery5163label` and `avery5163biglabel`: while the physical media is same, the formatting of addresses is quite different.

New feature
Version 1.2

`\SetBigLabel{W}{H}{t}{l}{r}{N_c}{N_r}`

If your label size is not listed in Table 4, put in the preamble of your document the command `\SetBigLabel{W}{H}{t}{l}{r}{N_c}{N_r}`.

New feature
Version 1.2

3.3 Printing details

EnvLab typesets envelopes or sheets of labels just after the main text of all letters in the documents. Most printers that have paper tray and manual feeding slot use manual slot if it is not empty and tray otherwise. When printing envelopes or labels on such printers, you wait until the text of letters is printed, and then insert envelopes or label sheets one by one in the manual feeding slot.

`\AtBeginLabels{Printer specific commands}`
`\AtBeginLabelPage{Printer specific commands}`

However some printers have several paper trays and even paper trays for envelopes. Moreover, sometimes the switching between trays can be performed

automatically by software commands. If you know such commands for your printer and know how to insert them in the `.dvi` file (e.g. through `\specials`), you can use the hook `\AtBeginLabels`. Put the printer specific commands in the argument of `\AtBeginLabels`. If you succeed, please e-mail me these commands and the specifications of your printer, so I can include them in the future releases of *EnvLab*. Note that the command `\AtBeginLabels` is cumulative: if you use it several times in the same document, the new commands will be appended without overwriting the previous definitions.

New feature
Version 1.1

The command `\AtBeginLabelPage` works in the same way, but its argument will be inserted at the beginning of each *page* of *EnvLab* output, i.e. before printing each envelope or label sheet.

New feature
Version 1.1

The code for *PostScript* printers is described in Section 5.

There are differences in the handling of the text close to paper edges from printer to printer. Since envelopes and label sheets have text near the edges, you might need to tune the offsets. For labels you can use the command `\SetLabel` to do this. The optional first argument of the command `\SetEnvelope` sets the distance between the leading edge of “logical paper” and the physical leading edge of the envelope (0 pt by default).

`rotateenvelopes, norotateenvelopes`
Options for *graphics* package

Usually envelopes are printed in the landscape mode, i.e. rotated by 90°. The package options `rotateenvelopes` (default) and `norotateenvelopes` control the rotation. Note that if you want to rotate envelopes, you need the standard package *graphics* installed on your system. Also, you need a *dvi* driver that understands rotation commands of the *graphics* package. (I think currently only *dvips* does this). The package *graphics* is called internally by *EnvLab*. If you need to pass specific options to the *graphics* package, include it in the list of options of *EnvLab*. For example, the command `\usepackage[personalenvelope,dvips]{envlab}` calls *graphics* with the option *dvips*.

`centerenvelopes, leftenvelopes, rightenvelopes,`
`customenvelopes, \EnvelopeLeftMargin`

Most of manual feeding slots accept non-standard paper (like envelopes) *centered*. However there are some printers that require non-standard paper to be pushed to the left or right end of the slot. The package options `centerenvelopes` (this is the default option), `leftenvelopes`, `rightenvelopes` and `customenvelopes` control the position of the envelope with respect to the slot. The first three options are self-explanatory. The fourth gives the control over the envelope positioning to the user. If you choose this option, you must set the length `\EnvelopeLeftMargin` before printing the en-

velopes. For example to shift the envelope for 2" from the left edge use `\setlength{\EnvelopeLeftMargin}{2in}`

`\FirstLabel{Row}{Col}`

Sometimes you need to print labels on a partially used sheet. The command `\FirstLabel{Row}{Col}` allows you to start printing of labels from the given position. For example, the command `\FirstLabel{3}{2}` causes *EnvLab* to start printing labels beginning with the second label in the third row. Note that labels are printed row by row (*not* column by column, like in the standard L^AT_EX 2_ε `letter` class).

New description
Version 1.2
New feature
Version 1.1

3.4 Formatting of the address (barcodes and capitalization)

In the United States (and many other countries as well) the mailing pieces are sorted by machines. This process is greatly facilitated if the addresses typesetting is enhanced for machine readability.

USPS standards [1] establish two ways for making the addresses machine readable: barcodes and special printing of addresses for optical character recognition (OCR) devices. In principle any method would be sufficient, but it seems reasonable to play it safe using *both* methods. Therefore *EnvLab* by default both prints barcodes and prepares addresses for OCR. This behavior can be controlled through package options.

Note that only “To-Address” should be machine-readable. The return address can be formatted more freely. You can, for example, include your logo in the *return* address (see Section 4)

`printbarcodes, noprintbarcodes`

The addresses in the US contain “zipcodes”—strings of five digits (5-code) or 9 digits divided by dash (5+4 code). The 5+4 code is actually a detalization⁷, so the zipcode 12345-6789 can be written as just 12345. This code is converted into a series of long and short bars and printed on a label or envelope. If the option `printbarcodes` (default) is selected, *EnvLab* tries to extract zipcode from the address and print it. It defines zipcode as a sequence of digits that:

1. Has no characters other than digits and dashes (-) inside it
2. Has no groups in braces ({})inside it and is not braced itself
3. Is the last in the address field

⁷There is an even finer detalization provided by the so called DPC numbers [1]. *EnvLab* does not support it yet

The option `noprintbarcodes` suppresses the typesetting of barcodes.

`alwaysbarcodes, noalwaysbarcodes`

Sometimes the rule 3 is too harsh. Consider, for example, the following address:

Mr. A. B. User
32 Omega Road
Palo Alto Ca 12345
USA

Obviously it has a zipcode, however *EnvLab* normally will not see it. The option `alwaysbarcodes` lifts this restriction, and *EnvLab* typesets barcodes for the last number met in the address even if it is followed by some other characters. Be careful with this option! If you select it, all addresses must actually have zipcodes. Otherwise *EnvLab* will happily convert to bars a street or apartment number.

This option is especially useful if the addresses are not typed in manually, but are prepared by some mail merge program like *mailing* package. Then they can contain spaces at the end, and *EnvLab* will not recognize zipcodes unless `alwaysbarcodes` is selected. The option `noalwaysbarcodes` (default) suppresses this behavior.

`capaddress, nocapaddress`

To facilitate OCR *EnvLab* typesets addresses in **12pt sans serif** font. The machine readability of the addresses is increased if the following recommendations of US Postal service are followed:

- Converting the addresses to uppercase
- Stripping punctuation from the addresses
- Inserting 1 pt kern between the letters

The result looks rather ugly for human eye. However, it is intended not for humans, but for machines. We will call this processing *address capitalization*. *EnvLab* performs capitalization of the “To-addresses” automatically if the option `capaddress` (default) is selected. The option `nocapaddress` suppresses capitalization of the addresses.

If you decide to capitalize the addresses, be careful with the accented letters. Since *EnvLab* processes the address letter by letter⁸, it tries to insert kern between “ and u in the word M“uller causing an error. Therefore all accented

⁸Rather, token by token

letters should be enclosed in braces. The correct way to typeset Herr. Müller is `Herr.\M{"u}{ller}`⁹.

3.5 Printing of return addresses

`printreturnaddress`, `noprintreturnaddress`

The return addresses are printed on the envelopes if the package option `printreturnaddress` (default) is chosen. Alternatively, the package option `noprintreturnaddress` suppresses the printing of the return address. Section 4 describes how to customize your return address.

New feature
Version 1.1

3.6 Change of settings for some labels

`\suppresslabels`, `\resumelabels`,
`\suppressonelabel`, `\resumeonelabel`

In many cases your `.tex` file contains many `letter` environments. By default, if the command `\makelabels` appears in the preamble, all them will generate mailing labels. Sometimes you may want to override this behavior. *EnvLab* provides four handy commands for this. The command `\suppresslabels` issued anywhere before `\end{letter}` will suppress printing of mailing labels for the current and subsequent letters—until the command `\resumelabels` is issued. The commands `\suppressonelabel` and `\resumeonelabel` are similar, but act only on the current label.

New feature
Version 1.2

`\ChangeEnvelope`, `\ChangeLabel`, `\ChangeBigLabel`

The commands `\SetEnvelope`, `\SetLabel`, `\SetBigLabel` have immediate effect: they set the sizes of all following mailing labels. The mailing labels, automatically generated by `letter` environments, are written to the `.aux` file, and therefore they all will be printed for the envelope or labels size set by the last `\Set` command. Sometimes, however, one needs to print envelopes for the different `letter` environments at different sizes. The commands `\ChangeEnvelope`, `\ChangeLabel` and `\ChangeBigLabel` have the same meaning and arguments as the corresponding `\Set` commands. However, instead of setting the media, they write the information into the `.aux` file, and the actual change is delayed until the `.aux` file is read (i. e. at the end of the document). Therefore they act only on the mailing labels, extracted from the `letter` environments, that follow this command.

New feature
Version 1.2

⁹I probably should strip all accents since they might confuse OCR. However USPS says nothing about accents, and I decided to preserve them.

```

\documentclass[12pt]{letter}

\address{%
  Joe Casanova\\1 Lambda Street\\Anyplace, NY 12345}
\signature{Joe}

\begin{document}

\begin{letter}{%
  Mary McKeen\\
  2 Alpha Street\\
  Otherplace, NY 12346\\[2ex]
  Re: Our love}
  \opening{Dear Mary:}
  I love only you
  \closing{With love,}
\end{letter}
\end{document}

```

Figure 6: A wrong way to include subject information in the letter

3.7 Enhancements for the letter environment

Some people letters contain below the address the subject like this

New feature
Version 1.2

Re: our recent talk

A way to do this is to include it in the address (see Figure 6). However, this additional info will be put in the mailing label, which is wrong. The package *EnvLab* defines a command `\re` to cope with this.

`re, nore`

This command poses the following problem. The rest of the *EnvLab* package meant to work not only with the standard `letter` class, but with any other letter classes that write address information to the `.aux` file in the standard format. However, if a package makes a change to the formatting of the letter itself, we cannot be guaranteed that it will work with all letter classes. Therefore we chose the following solution: the additional features are enabled only if the package option `re` is selected. If the option `nore` (default) is selected, the package works in the “compatibility mode”, and the additional features are disabled¹⁰.

`\re`

The command `\re` defines additional subject information to be put between the

New feature
Version 1.2

¹⁰For T_EXperts: if the option `re` is chosen, *EnvLab* redefines the `\opening` command. See the file `envlab.dtx` for additional information.

```

\documentclass[12pt]{letter}

\usepackage[avery5160label,re]{envlab}
\makelabels

\address{%
  Joe Casanova\\1 Lambda Street\\Anyplace, NY 12345}
\signature{Joe}

\begin{document}

\begin{letter}{%
  Mary McKeen\\
  2 Alpha Street\\
  Otherplace, NY 12346}
  \re{Our love}
  \opening{Dear Mary:}
  I love only you
  \closing{With love,}
\end{letter}
\end{document}

```

Figure 7: The *EnvLab* way to include subject information in the letter

address and opening. It is very simple: just put `\re{Subject}` anywhere before the `\opening` command (see Figure 7).

Actually the scope of the `\re` command is the same as the scope of the commands like `\address` or `\signature`: if it is issued outside the `letter` environment, it affect all subsequent letters. If it is issued inside the `letter` environment (but before the `\opening` command), it is local to the current letter. To disable global `\re`, just issue this command with empty argument: `\re{}`.

4 Customization

`\returnaddress`

Many people and companies want to print their logos on the envelopes. You can include any image in your return address. The macro `\returnaddress` controls the contents of the “From-address” field on your envelope. *EnvLab* takes it from the `\address` command in your document. However you can easily redefine it. For example, if the file `mylogo.eps` contains your logo, you put in the preamble `\renewcommand{\returnaddress}{\protect\includegraphics{mylogo}}` to customize your envelopes. If you want return labels with your logo, use command like `\printreturnlabels{180}{\protect\includegraphics{mylogo}}`. You can include both logos and textual information into the `\returnaddress`

New description
Version 1.1

macro. While customizing return address, it is useful to know that L^AT_EX **letter** document class stores the contents of the `\address` command in the `\fromaddress` macro, so the default definition of the return address implemented in *EnvLab* is `\renewcommand{\returnaddress}{\fromaddress}`.

Customization of lengths

All lengths (heights, widths, margins) are user-customizable. Consult the file `envlab.dtx` for their definitions and use.

`\ReName`

The subject name for the `\re` command is stored in the `\ReName` macro. Normally it is defined as plain style “Re: ”. To `\newcommand{\ReName}{Re: }` (note the space after semicolon!). To change this, use `\renewcommand`, for example `\renewcommand{\ReName}{\textbf{Subject: }}`.

New feature
Version 1.2

`envlab.cfg`

If you use *EnvLab* for some time, you probably would have a number of options and commands that you execute in most documents prepared with the package. You can save the typing by putting such commands in the configuration file `envlab.cfg`. A sample configuration file is included in the *EnvLab* distribution. You are free to hack it in any way you like¹¹. This file consists of two parts: `\ExecuteOptions{options}` and `\AtEndOfPackage{customization commands}`. The options listed in the first part supersede the default options of *EnvLab*. However the options explicitly listed as the arguments of the `\usepackage` command supersede the options in the configuration file. The commands listed in the second part of the configuration file—as the arguments of the `\AtEndOfPackage` command—supersede all definitions in the package itself. Therefore by hacking `envlab.cfg` you can completely change the behavior of the package without modifying *EnvLab*.

5 Commands for *PostScript* printers

I myself know next to nothing about programming of *PostScript* printers, and the following is based on contributions of *EnvLab* users.

`pswait, nopswait`

If you use *dvips*, you can ask it to switch your printer to manual mode just

New feature
Version 1.1

¹¹ *Important:* `envlab.cfg` is the only file you should modify. You are *not* allowed to modify any other files in the *EnvLab* distribution.

before printing envelopes and labels. The printer will print the main body of the letter(s) using the paper tray, and then stop, waiting for envelopes or label sheets to be fed in the manual slot. The option `pswait`, based on the code by *William Slough* <cfwas@eiu.edu>, inserts the corresponding *PostScript* specials in your output. The option `nopswait` (default) suppresses this behavior.

`\PSwait`

William Slough's code can be useful in other situations when you need to switch to manual mode in the middle of the document. The command `\PSwait` inserts the corresponding *PostScript* code in the *dvips* output. (An attentive reader has probably already guessed that the `pswait` option is implemented through the command `\AtBeginLabels{\PSwait}`).

New feature
Version 1.1

`psautotray, nopsautotray`

Uri Blumenthal <uri@ibm.net> wrote code for automatic switching to other trays. For example, if your envelopes are loaded into `/otherenvelopetray`, try the following code:

New feature
Version 1.2

```
\AtBeginLabels{%
  \special{ps:clear grestore
    statusdict begin false setduplexmode
    /manualfeed true def
    /otherenvelopetray end 0 0 bop }}
```

If the package option `psautotray` is selected, *EnvLab* will try to guess the proper tray from the envelope you chose. The option `nopsautotray` (default) disables this feature. At present this mechanism is rather experimental; I would be grateful for failure/success reports as well as for suggestions. Note that `pswait` and `psautotray` options are not compatible (`psautotray` switches the printer to the manual mode anyway). If you selected them both, only the one selected last will be chosen.

Another solution by *Robert Estes* <estes@ece.ucdavis.edu> works for Optra R+ printers:

New description
Version 1.2

```
\AtBeginLabels{\special{ps:
clear grestore
1 dict dup /MediaPosition null put setpagedevice
1 dict dup /ManualFeed true put setpagedevice
1 dict dup /Policies 1 dict dup /PageSize 2 put put setpagedevice
2 dict dup /PageSize [297 684] put dup /ImagingBBox null put setpagedevice
0 0 bop
}}
```

The code by *Greg Jumper* <jumper@lens.sri.com> works for HP LaserJet 4MV:

New description
Version 1.2

```
\special{! </ManualFeed true /DeferredMediaSelection true  
/PageSize [297 684] /ImagingBBox null> setpagedevice}
```

6 Bugs and limitations

The most important limitation of *EnvLab* is related to an essential limitation of \TeX itself. People usually want their envelopes printed rotated 90° , so the envelopes are inserted in the printed by the short side. Unfortunately \TeX was not designed with the text rotation in mind. Therefore “basic” \TeX does not allow to typeset envelopes in this manner. The standard $\text{\LaTeX} 2_\epsilon$ package *graphics* uses *PostScript* to add this functionality to \TeX . *EnvLab* uses *graphics* internally if the option `rotateenvelopes` (default) is in effect. Therefore to typeset rotated envelopes you need *graphics* and either a *PostScript* printer or *ghostscript*. Otherwise use `norotateenvelopes` option if your printed can process envelopes inserted by the long side. I understand that there is a problem with printing rotated text on non-*PostScript* printers. Probably the authors of *dvi* drivers should be urged to address it.

New description
Version 1.1

EnvLab thinks that all options it cannot understand belong to the *graphics* package and sends them there. Therefore if you misspell an option of the *EnvLab* package, you will receive an error message from the *graphics* package rather than from *EnvLab*.

New description
Version 1.1

Please send bug reports to `boris@plmsc.psu.edu`. You can find experimental versions of *EnvLab* at my homepage (<http://planck.psu.edu/~boris>).

7 Acknowledgements

Since the first version of *EnvLab* was released, many users helped me with bug reports, suggestions and code contributions to enhance it. I would like to express my gratitude to Uri Blumenthal, Arnie Ostebee, William Slough, Ed Reingold, Jos Jansen, Juergen Schlegelmilch, Jim Hill, Greg Jumper, Robert Estes, Genick Bar-Meir and many others for their help.

New description
Version 1.2

8 Legalese

The package *EnvLab* is provided “as is” and comes with absolutely no warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The

entire risk as to the quality and performance of the program is with you. Should the program prove defective, you assume the cost of all necessary servicing, repair or correction.

In no event unless required by applicable law will the author of the program be liable to you for damages, including any general, special, incidental or consequential damages arising out of any use of the program or out of inability to use the program (including but not limited to loss of data or data being rendered inaccurate or losses sustained by you or by third parties as a result of a failure of the program to operate with any other programs), even if such holder or other party has been advised of the possibility of such damages.

In particular, while every effort was made to provide typesetting of mailing pieces accordingly to the United States Postal Service recommendations, the author of the package does not warrant neither successful delivery of mail nor granting of mailing discounts in the USA or any other countries.

EnvLab package is covered by the same license as the current L^AT_EX 2_ε package (see the files `legal.txt` and `modguide.tex` in the L^AT_EX 2_ε distribution).

Avery and all Avery codes are trademarks of Avery Dennison Corporation.

References

- [1] USPS. *Designing Business Letter Mail (Pub 25)*, August 1995.