LaTeX Macros

Version 1.09

Juan M. Aguirregabiria
E-mail: `juanmari.aguirregabiria@lg.ehu.es`
WWW: `http://tp.lc.ehu.es/jma.html`

March 2007

Copyright

The program `LaTeXmac.exe`, the help file `LaTeXmac.chm` and the documentation file `LaTeXmac.pdf` are copyrighted:

Some code was derived from ideas from the excellent "Windows 95: A Developer's Guide", J. Richter and J. Locke, M&T Books, New York, 1995.

The `LaTeX2e.hlp` file has been slightly modified from a public domain file and is distributed under its original copyright (see the `LaTeX2e.hlp` file for the full copyright notice and the distribution conditions).

Other brand and product names are trademarks or registered trademarks of their respective holders.

Disclaimer

Introduction

Tired to write once and again the `\begin{equation} \end{equation}` pair each time you have to write a numbered displayed mathematical expression?

Do you have trouble remembering which is the LaTeX command for the large arrow?

What about all the stuff you may enter before starting the true job?

LaTeX Macros is a utility to send to your editor LaTeX commands. It also helps you writing the document template (with options and packages) and create for you the skeleton of an array, a table or complex environments. You only have to select the corresponding button in a toolbar.

Installing LaTeX Macros

To install the program run the distribution file and follow the instructions. It will copy to the directory you select the executable file, `LaTeXmac.exe`, the help files `LaTeXmac.cnt`, `LaTeXmac.hlp` and `LaTeX2e.hlp` and the documentation file: `LaTeXmac.rtf`.

You may proceed now (or once you have experimented a bit with the program) to **define a favorite editor**.

Defining a favorite editor

If you always use the same editor to type your LaTeX sources, you may want **LaTeX Macros** to select it automatically for output, instead of having to select the editor from a list each time the program starts. You may proceed as follows:

1. Make sure that the editor is running before you start **LaTeX Macros**, or start it and press the **Refresh** button to add the editor window to the output list.

2. Open the **Options dialog** and in the **Output window** sheet

   - Select the **Search the following window when starting** if you want **LaTeX Macros** to check if your editor is running when **LaTeX Macros** is launched.

   - Select the **Search the following window always** if you want **LaTeX Macros** to check if your editor is running every time the macro would be sent to the clipboard, because no output window is selected.

   - Press the **Get current class name and caption** button, and the **Class name** and **Caption includes** will be filled in with the class name and caption of your editor's main window.

   - Make sure that in the **Caption includes** box only the editor name, and not the currently opened file if any, is included.

The program will decide that your editor is currently running if it finds a window with:

   1. The same class name as entered in **Class name**. If no **Class name** is specified, all classes match.

   2. A caption that contains the string in **Caption includes**. If no **Caption includes** is specified, all captions match.

Of course, if neither **Caption includes** nor **Class name** are provided, no editor if found. You must specify at least one of these values, but it may be enough with only one of them, if it is so particular that the possibilities to have another window with the same value by chance are negligible.

For instance, let us assume that your editor is the great Programmer's File Editor by Allan Phillips (http://www.lancs.ac.uk/people/cpaap/pfe). You launch the editor, which may display a caption like the following one, if a document window is maximized:

```
Programmer's File Editor – [D:\Notes\Series\Series.tex]
```

Start **LaTeX Macros**, press the ☑ button to open the **Options Dialog Box**, select the **Output window** sheet and there **Search the following window always** (if you want to use PFE always). Then press the **Get current class name and caption** button and the following values will be displayed:

- **Class name**: `PFE32_Frame`

- **Caption contains**: `Programmer's File Editor – [D:\Notes\Series\Series.tex]`

Since it is rather unlikely that another program will use the same class name for its topmost window, you may safely delete completely the **Caption contains** entry. In any case you HAVE TO DELETE THE DOCUMENT SPECIFICATION and leave at most something like

```
Programmer's File Editor
```

Otherwise the editor will be selected only when the same file is open and maximized!

You may save some screen space by selecting the **Hide window list and Refresh** button. Of course, at any time you may uncheck this option to recover the elements.

Uninstalling LaTeX Macros
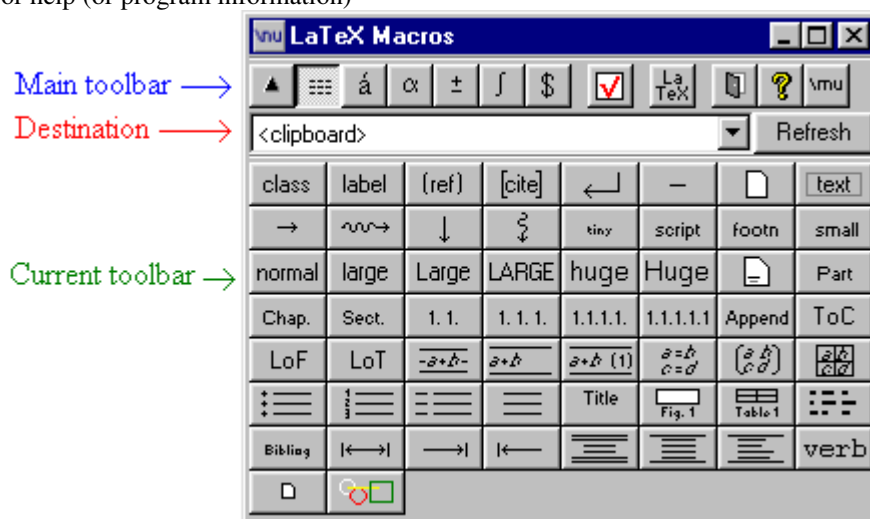
To uninstall **LaTeX Macros**,

1. Use `Add or remove programs` from the Control panel.
2. If necessary, remove any remaining files in the installation directory.

Running LaTeX Macros

LaTeX Macros may be run in any way used to start a Windows 95 program: from the Start menu, a shortcut in the desktop or a folder or My PC, from the Execute dialog box or from a DOS window.

You may want to add a keyboard accelerator to invoke the program from your editor. Since if the program was already running that copy is brought to the foreground instead of launching a second instance, the use of a keyboard shortcut may be a convenient way to have quick access to the program.

- By using the main toolbar you may
  - select the toolbar you want to see
  - hide everything, except the caption and main toolbar
  - select any LaTeX command form a list
  - change the program options
  - exit the program
  - ask for help (or program information)

- From the destination list you select the window to which the LaTeX command will be sent. It is also possible to send it to the clipboard and then paste it. If you always use the same editor you may want to avoid having to select it each time from the list by **defining a favorite editor**.
- The list of active windows is updated when the **Refresh** button is pressed.
- When you click on a button from the current toolbar it will be sent to the current destination.

Remember: The purpose of each button in the program is reminded by a pop-up hint that appears when the mouse cursor is over it for about one second.

See also Customizing LaTeX Macros.

Customizing LaTeX Macros

You may customize the program in a number of ways:

- By dragging its caption bar you may select a new placement, which will be remembered by the program.
- Dragging its borders you may resize the main window.
- You may change the position of any button by dragging it while holding down the Shift key. You may even delete it by dragging it off the toolbar. To recover the button or to arrange toolbar layout in an easier way, double click on a free toolbar spot and the Customize toolbar dialog box will appear.
- Pressing the **Options** button you may change the way the program behaves in the Options dialog box.

See also **Defining a favorite editor**.

Equation Array Dialog Box
This dialog will create an skeleton of equation array whose entries you may fill afterwards.

Option	Meaning
Rows	Number of equations
No line number	To suppress line numbers (eqnarray*)

Array Dialog Box
This dialog will create an skeleton of array whose entries you may fill afterwards.

Option	Meaning
Columns	Number of columns
Rows	Number of rows
Horizontal alignment	How to align each entry: left, center or right
Parentheses	To put (big) parenthesis around the array

Tabular Environment Dialog Box
This dialog will create an skeleton of table whose entries you may fill afterwards.

Option	Meaning
Columns	Number of columns
Rows	Number of rows or equations
Horizontal alignment	How to align each entry: left, center or right
Vertical alignment	How to align each entry: top, center bottom
Horizontal lines	Where to draw horizontal lines
Top and bottom	Above and below all lines
Between rows	Separating rows
Vertical lines	Where to draw vertical lines
Left and right	Around the table
Between columns	Separating columns

Options Dialog Box
In this dialog you can control the program behavior.

Option

Operation sheet

Always on top
      LaTeX Macros will appear over other windows

Use arrow keys
      The cursor will be located by sending arrow keys to the destination window

After sending keys
      When the LaTeX command has been sent, the program main window will,

  Do nothing
      remain where it was without input focus

  Recover focus
      recover the input focus

  Minimize main window
      be minimized

  Hide main window
      be hidden

To send macro
      To copy the command to the destination window,

  Paste keys
      the keys will be sent

  Shift+Ins

`Shift+Ins` keys will be sent after copying the command to the clipboard

Ctrl+V
`Ctrl+V` keys will be sent after copying the command to the clipboard

When sending a new line to the editor include the following characters:

Carriage return = `^M` = 12 = OD

Line feed = `^L` = 10 = OA

Output window sheet

Search the following window after starting

Try locating your favorite editor when the program is started

Search the following window always

If the output is directed to the clipboard, use instead the window corresponding to your favorite editor, if currently available

Class name

A string identifying the type of window used by your favorite editor

Caption includes

A string that is ALWAYS contained in the caption of your favorite editor

usually its name. Do not add here any document name!

Get the current class name and caption

Press this button to get the class and caption of the window currently selected in the **Destination list**

Hide window list and Refresh button

Hide the destination list and the associated button to save a bit of screen space

Sending macros

With most editors and word processors the best way to send a LaTeX command is to send directly the equivalent keys by using the default **Paste keys** in the **Options Dialog Box**. This saves the current clipboard contents and allows locating the cursor at the right spot by sending arrow keys, which cannot be sent through the clipboard. Unfortunately, we know of one (otherwise excellent and free) editor that is not able to recognize some key combination that have to be used from some non-English keyboards to send symbols as usual as \ and {. If this is the case, use the second (**Shift+Ins**) or third (**Ctrl+V**) methods to copy the macro.

LaTeX2e Commands Dialog Box

From this dialog box you may select (nearly) any LaTeX macro, command or environment from a **Command** list. The corresponding **Definition** will be displayed in a box and you may press the **Description** button to obtain a help topic describing the command.

Customizing Toolbar Dialog Box

This dialog box is displayed when you double-click on a free toolbar spot. It will let you select the buttons you want in each toolbar and their relative order. Right click on any button or control to obtain more information.

LaTeX Document Template (Class and options)

In this sheet you select the document class and options to be sent to the destination window.

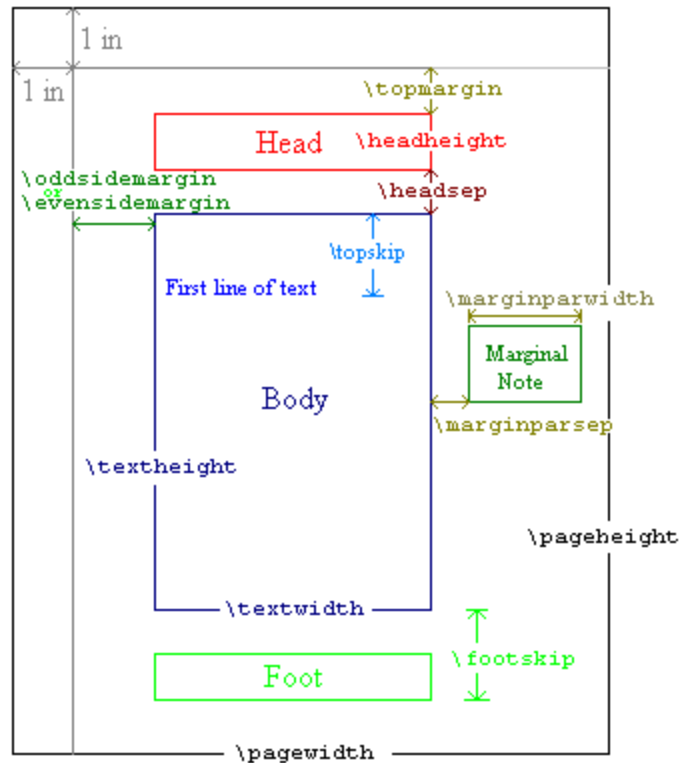| Option	Meaning
Document Class	Write here (or select from the list below) the document class
Character Size	Select the character size (10, 11 or 12 points)
Options	Select class options

LaTeX Document Template (Packages)

In this sheet you select the package(s) to be used by the document class and options that will be sent to the destination window.

LaTeX Document Template (Page Style)

In this sheet you select the head style and page numbering scheme to be used by the document class and options that will be sent to the destination window.

LaTeX Document Template (Page Dimensions)

In this sheet you select the page dimensions to be used by the document class and options that will be sent to the destination window.

Only the non-void parameters will be included.

Suggestions, bugs and help

The Author would highly appreciate receiving information about any bug or problem found in the program. Suggestions to improve **LaTeX Macros** in future versions are also welcome.

I would especially appreciate help to correct the English version of the help and documentation files.