

# The optional package\*

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2005/01/26

Enable multiple versions of a document to be printed from one source file, especially if most of the text is shared between versions.

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## 1 How to use

One way to use this package is to declare (for example)

```
\usepackage[opta]{optional}
```

at the beginning of your document, and flag optional text throughout your document like:

```
\opt{opta}{Do this if option opta was declared}
\opt{optb}{Do this if option optb was declared}
\opt{optx,opty}{Do this if either option optx or opty}
\opt{}{Never print this text!}
\opt{opta}{\input{appendices}}
\optv{xam}{Type: \verb|[root /]$ rm -r *|.}
```

Note that both the package option and the “\opt” argument can contain lists of options although, in practice, one or the other should be a single option name. Lists are allowed in both places to allow more flexibility in the style of use. (But making the definitions much more difficult, Grrr.)

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\*This manual corresponds to optional v2.2b, dated 2005/01/26.

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Just as for “\includeonly”, you will have to edit the main document file to switch option codes (i. e., change the “\usepackage” line). There are, however, several ways to use this package without altering the main document file: separate files, file-name sensing, interactive prompting, and command-line option selection.

Typically, different versions of a document will require different document class and package setup, besides the different tags for `optional.sty`. In that case it is best to have a separate main file for each version of the document. Each stub file will declare the document class and load some packages (including this one) and then input the rest of the document from a file common to all versions.

```
\documentclass[A0]{poster}
\usepackage[poster]{optional}
\input{my_paper}
```

If the different opt-tags match the different stub file names (file `poster.tex` will typeset the “poster” version) then you can specify

```
\usepackage[\jobname]{optional}
```

Alternatively, this “\jobname” technique can make use of symbolic links, if your computer system supports them, by having a single main input file accessed under different names (and different “\jobname”s).

Another scheme is to invoke  $\text{\LaTeX}$  with the command line such as:

```
latex "\def\UseOption{opta,optb}\input{file}"
```

(with quoting appropriate to your operating system) then options “opta” and “optb” will be used in addition to any options specified with the “\usepackage” command.

You can prompt yourself to specify the option(s) with every run through  $\text{\LaTeX}$ :

```
\usepackage{optional}
\newcommand{\ExplainOptions}{man = users manual, check = checklist,
    ref = reference card, post = poster.}
\AskOption
```

The definition of “\ExplainOptions” is optional; it only serves to help the person who answers the question. The “\AskOption” is also optional; it will be executed automatically whenever `optional.sty` sees no list of options. This method is too tedious to use much.

The normal restrictions forbidding special characters in package options and reference tags apply also the the tags used by the “\opt” command.

These are not ‘comment’ macros: The optional text must be well-formed with balanced braces, even if not printed. The “\opt” command *is* completely ‘expandable’ which means it is robust and can even be used in messages (“\typeout”).

As usual, “\verb” commands and verbatim environments cannot be used in the argument to “\opt”. For this purpose there is a variant form of “\opt” called “\optv” (optional verbatim) which may have a limited class of verbatim material in the argument. It can do so by leaving the braces around the argument, which may have undesired side effects. For an “\optv” argument to be successfully ignored, the verbatim material must have balanced braces etc.

The “\opt” command is only intended for small sections of text. If you need to optionally include whole sections or chapters, put that material in a separate file, and “\opt”-ionally use an “\input” command:

```
\opt{internal}{\input{prog_listings}}
```