

The `docmute` package^{*}

T. M. Trzeciak[†]

October 8, 2009

1 Introduction

The structure of \LaTeX documents doesn't allow one document to be included as a part of another (at least not without some hacking). This package tries to remove this limitation and enable the standard `\input` and `\include` commands to be used on standalone documents just as if they contained no preamble.

2 Usage

The package is loaded with the usual `\usepackage{docmute}`. It redefines the `\documentclass` command in such a way that everything between this command and the `\begin{document}` is skipped, as well as everything after the `\end{document}`. No attempts are made to analyse the actual content of the preamble. It is up to you to ensure that the main document loads all packages required by subsidiary documents.

`\docmute` In rare cases some commands might be already present already before the `\documentclass` command. These commands would be then normally executed by the main document. You can prevent that by putting `\csname docmute\endcsname` at the top of the inputted document. The `\docmute` command has the same effect as the redefined `\documentclass`. Executing it through the control sequence forming primitive rather than directly ensures that standalone compilation is still possible. In that case `\csname docmute\endcsname` will have the same effect as `\relax`.

By default, nesting of inputted documents is not allowed, i.e. inputted documents cannot themselves input other documents. This behaviour can be changed with the package option `nested`. With this option inputted documents are surrounded by a group and nesting becomes possible. Note, that due to grouping only global macro (re)definitions will be visible in the parent document.

^{*}This file describes version v1.1, last revised 2009/10/08.

[†]E-mail: t34www@googlemail.com

3 Known limitations

The `\documentclass` and/or `\csname docmute\endcsname` command has to be in the same file as `\begin{document}`. This is due to employed preamble gobbling method, which relies on scanning for delimited macro arguments and which doesn't work across the file boundaries.

4 Implementation

Initial boilerplate code.

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{docmute}[2009/10/08 v1.1 Input standalone documents]
```

Macro used for comparison to see if we already reached `\begin{document}`.

```
3 \def\docmute@docenv{document}
```

The main macro of this package. Grab everything before the `\begin` command and check what argument was passed to it.

```
4 \long\def\docmute@gobblepreamble#1\begin#2{%
5   \def\docmute@thisenv{#2}%
```

If `\begin{document}` was reached we can stop gobbling, otherwise we continue with tail recursive call.

```
6   \ifx\docmute@thisenv\docmute@docenv
7     \docmute@afterpreamble
8   \else
9     \expandafter\docmute@gobblepreamble
10  \fi
11 }
```

After gobbling stops, `\enddocument` is redefined to stop input when it's executed. Excess spaces, if any, are taken care of by `\ignorespaces`.

```
12 \def\docmute@afterpreamble{%
13   \docmute@atbegindoc
14   \def\enddocument{%
15     \docmute@atenddoc
16     \aftergroup\ignorespaces
17     \endinput
18   }%
19   \ignorespaces
20 }
```

Save original definitions of `\document` and `\enddocument`

```
21 \let\docmute@document=\document
22 \let\docmute@enddocument=\enddocument
```

Hooks to implement nesting.

```
23 \let\docmute@atbegindoc=\relax
24 \def\docmute@atenddoc{%
25   \let\enddocument=\docmute@enddocument
26   \begingroup
27 }
```

Define the `\docmute` command

```
28 \let\docmute=\docmute@gobblepreamble
```

Redefine the `\documentclass` command at the beginning of the document. `\AtBeginDocument` happens too early to be used for that, so we need to append directly to the `\document`.

```
29 \def\document{%
30   \docmute@document
31   \let\documentclass=\docmute
32   \ignorespaces
33 }
```

Finally, handle the only option we have and that's it.

```
34 \DeclareOption{nested}{%
35   \let\docmute@atbegindoc=\begingroup
36   \let\docmute@atenddoc=\relax
37 }
38 \ProcessOptions
39 \endinput
```