

The `useclass.sty` Package: Use Classes as Packages

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TL;DR Use `\useclass` to load a class with the same usage as `\usepackage`:

```
\usepackage{useclass}  
\useclass[full]{l3doc}
```

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1 Introduction

`useclass` is a package that enables the usage of classes as packages. It was originally designed for the `l3doc` class, which is employed for documenting \LaTeX code with numerous useful features. However, employing the `l3doc` class as a package is not convenient when using the developing class as the style for the document. Therefore, this package provides a simple interface for utilizing classes as packages. The package `useclass` was

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initially released on 2024-03-04, under the LaTeX Project Public License Version 1.3c¹ or later, and is maintained at <https://github.com/huangyxi/useclass>.

2 Usage

```
\useclass {<class>}
\useclass [<options>] {<class>}
```

Load class with options, where $\langle options \rangle$ is the options for the class and $\langle class \rangle$ is the class name without the extension.

Example for a dtx file:

```
% \iffalse
\documentclass{article}
\usepackage{l3doc}
\begin{document}
  \DocInput{\jobname.dtx}
\end{document}
% \fi
%
% \section{Implementation}
% \begin{variable}{\l_demo_tl}
%   \begin{macrocode}
\tl_new:N \l_demo_tl
%   \end{macrocode}
% \end{variable}
```

3 useclass Implementation

```
1 <@@=useclass>
2 <*package>
```

3.1 Variables

```
\_useclass_tempa_cs:w Temporary control sequence.
3 \cs_new_eq:NN \_useclass_tempa_cs:w ?
(End of definition for \_useclass_tempa_cs:w.)
```

3.2 Helpers

```
\_useclass_cs_swap:NN Define a helper function to swap two control sequences.
4 \cs_new:Npn \_useclass_cs_swap:NN #1 #2
5 {
```

¹<https://www.latex-project.org/lppl/lppl-1-3c.txt>

```

6     \cs_set_eq:NN \__useclass_tempa_cs:w #1
7     \cs_set_eq:NN #1 #2
8     \cs_set_eq:NN #2 \__useclass_tempa_cs:w
9   }

```

(End of definition for __useclass_cs_swap:NN.)

3.3 Dependences loading

useclass currently don't have any explicit dependences.

3.4 Patched Macros

```

\__useclass_LoadClass:n Patched \LoadClass to do nothing.
10 \cs_new:Npn \__useclass_LoadClass:n #1 {}

```

(End of definition for __useclass_LoadClass:n.)

3.5 Before Loading Class

```

\__useclass_use_before: These are the things to do before loading class.
11 \cs_new_protected:Npn \__useclass_use_before:
12   {
13     \__useclass_cs_swap:NN \LoadClass \__useclass_LoadClass:n
14   }

```

(End of definition for __useclass_use_before:.)

3.6 Loading Class

```

\__useclass_use_class:nn Load class with options.
15 \cs_new_protected:Npn \__useclass_use_class:nn #1 #2
16   {
17     \@fileswithoptions\@clsextension[#1]{#2}
18   }

```

(End of definition for __useclass_use_class:nn.)

3.7 After Loading Class

```

\__useclass_use_after: These are the things to do after loading class.
19 \cs_new_protected:Npn \__useclass_use_after:
20   {
21     \__useclass_cs_swap:NN \LoadClass \__useclass_LoadClass:n
22   }

```

(End of definition for __useclass_use_after:.)

3.8 User Interface

`\useclass` Load patch class with options.

```

23 \NewDocumentCommand {\useclass} { 0{ } m }
24 {
25   \__useclass_use_before:
26   \__useclass_use_class:nm {#1} {#2}
27   \__useclass_use_after:
28 }

```

(End of definition for \useclass. This function is documented on page 2.)

```

29 \</package>

```

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