# The classlist package

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2016/05/16 v1.5

**Abstract**

This package records the loaded classes and stores them in a list.

# Contents

# 1 Documentation

## 1.1 Background

This packages is an answer of a newsgroup question:

| | |
|---|---|
| Newsgroup: | comp.text.tex |
| Subject: | Finding the Document Class |
| From: | Herber Schulz |
| Date: | 18 Jun 2005 13:16:49 -0500 |
| Message-ID: | <herbs-D55DB9.13170418062005@news.isp.giganews.com> |

[*]Please report any issues at https://github.com/ho-tex/oberdiek/issues

## 1.2 Usage

Load this package before `\documentclass`:

```
\RequirePackage{classlist}
\documentclass[some,options]{whatever}
```

It then records the classes with options.

If used after `\documentclass`, `\@filelist` is parsed for classes. The additional data specified options and requested version is no longer available here.

`\MainClassName` contains the first loaded class.

`\ClassList` stores the class entries, eg.

$$\text{\texttt{\textbackslash ClassList}} \rightarrow \text{\texttt{\textbackslash ClassListEntry\{myarticle\}\{a4paper\}\{\}}}$$
$$\text{\texttt{\textbackslash ClassListEntry\{article\}\{\}\{\}}}$$

`\ClassListEntry` has three arguments:

| | |
|---|---|
| #1: | class name |
| #2: | options given in `\documentclass`/`\LoadClass` |
| #3: | requested version, not the version of class |

`\PrintClassList` prints the list on screen it can be configured by

`\PrintClassListTitle` for the title and

`\PrintClassListEntry` for formatting the entries. See the implementation for how to use these.

# 2 Implementation

1 ⟨∗package⟩

Package identification.

```
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{classlist}%
4   [2016/05/16 v1.5 Record classes used in a document (HO)]
5 \let\ClassList\@empty
6 \let\MainClassName\relax
```

Test, whether we are called before `\documentclass`.

```
7 \ifx\@classoptionslist\relax
8   \let\CL@org@fileswith@pti@ns\@fileswith@pti@ns
9   \def\@fileswith@pti@ns#1[#2]#3[#4]{%
```

| | |
|---|---|
| #1: | `\@clsextension` |
| #2: | options of `\documentclass`/`\LoadClass` |
| #3: | class name |
| #4: | requested version |

```
10     \ifx#1\@clsextension
11       \@ifl@aded#1{#3}{%
12         \PackageInfo{classlist}{%
13           Skipping class '#3', because\MessageBreak
14           this class is already loaded%
15         }%
16       }{%
17         \@ifundefined{MainClassName}{%
18           \def\MainClassName{#3}%
19         }{}%
20         \@temptokena\expandafter{%
21           \ClassList
22           \ClassListEntry{#3}{#2}{#4}%
23         }%
```

```
24        \edef\ClassList{\the\@temptokena}%
25      }%
26    \fi
27    \CL@org@fileswith@pti@ns{#1}[{#2}]{#3}[{#4}]%
28  }%
29  \let\@@fileswith@pti@ns\@fileswith@pti@ns
30 \else
```
Called after \documentclass.
```
31    \PackageInfo{classlist}{Use \string\@filelist\space method}%
32
33    \let\ClassListEntry\relax
34    \expandafter\def\expandafter\CL@test
35        \expandafter#\expandafter1\@clsextension#2\@nil{%
36    \ifx\\#2\\%
```
Name does not contain \@clsextension
```
37      \else
38        \expandafter\CL@test@i\CL@entry\@nil
39      \fi
40    }%
41    \expandafter\def\expandafter\CL@test@i
42        \expandafter#\expandafter1\@clsextension#2\@nil{%
43    \ifx\\#2\\%
44      \@ifundefined{opt@\CL@entry}{%
45      }{%
46        \@ifundefined{MainClassName}{%
47          \let\MainClassName\CL@entry
48        }{%
49        }%
50        \edef\ClassList{%
51          \ClassList
52          \ClassListEntry{\CL@entry}{}{}%
53        }%
54      }%
55    \else
```
Names with more than one \@clsextension are not supported.
```
56    \fi
57  }%
58  \@for\CL@entry:=\@filelist\do{%
59    \expandafter\expandafter\expandafter\CL@test\expandafter
60        \CL@entry\@clsextension\@nil
61  }%
62 \fi
```

\PrintClassListEntry
```
63 \providecommand*{\PrintClassListEntry}[3]{%
64   \toks@{* #1}%
65   \typeout{\the\toks@}%
66 }
```

\PrintClassListTitle
```
67 \providecommand*{\PrintClassListTitle}{%
68   \typeout{Class list:}%
69 }
```

\PrintClassList
```
70 \providecommand*{\PrintClassList}{%
71   \begingroup
72     \let\ClassListEntry\PrintClassListEntry
73     \PrintClassListTitle
74     \ClassList
75   \endgroup
76 }
```

`\CL@InfoEntry`

```
77 \def\CL@InfoEntry#1#2#3{%
78   \advance\count@ by \@ne
79   \def\x{#2}%
80   \@onelevel@sanitize\x
81   \edef\CL@Info{%
82     \CL@Info
83     \noexpand\MessageBreak
84     (\the\count@) %
85     #1 [\x]%
86     \ifx\\#3\\%
87     \else
88       \space[#3]% hash-ok
89     \fi
90   }%
91 }

92 \AtBeginDocument{%
93   \begingroup
94     \count@=\z@
95     \def\CL@Info{Class List:}%
96     \let\ClassListEntry\CL@InfoEntry
97     \ClassList
98     \let\on@line\@empty
99     \PackageInfo{classlist}{\CL@Info}%
100   \endgroup
101 }

102 ⟨/package⟩
```

# 3 Installation

## 3.1 Download

**Package.** This package is available on CTAN[1]:

[CTAN:macros/latex/contrib/oberdiek/classlist.dtx](CTAN:macros/latex/contrib/oberdiek/classlist.dtx) The source file.

[CTAN:macros/latex/contrib/oberdiek/classlist.pdf](CTAN:macros/latex/contrib/oberdiek/classlist.pdf) Documentation.

**Bundle.** All the packages of the bundle 'oberdiek' are also available in a TDS compliant ZIP archive. There the packages are already unpacked and the documentation files are generated. The files and directories obey the TDS standard.

[CTAN:install/macros/latex/contrib/oberdiek.tds.zip](CTAN:install/macros/latex/contrib/oberdiek.tds.zip)

*TDS* refers to the standard "A Directory Structure for TEX Files" ([CTAN:pkg/tds](CTAN:pkg/tds)). Directories with `texmf` in their name are usually organized this way.

## 3.2 Bundle installation

**Unpacking.** Unpack the `oberdiek.tds.zip` in the TDS tree (also known as `texmf` tree) of your choice. Example (linux):

```
unzip oberdiek.tds.zip -d ~/texmf
```

## 3.3 Package installation

**Unpacking.** The `.dtx` file is a self-extracting `docstrip` archive. The files are extracted by running the `.dtx` through plain TEX:

```
tex classlist.dtx
```

---

[1] [CTAN:pkg/classlist](CTAN:pkg/classlist)

**TDS.**   Now the different files must be moved into the different directories in your installation TDS tree (also known as `texmf` tree):

```
classlist.sty → tex/latex/oberdiek/classlist.sty
classlist.pdf → doc/latex/oberdiek/classlist.pdf
classlist.dtx → source/latex/oberdiek/classlist.dtx
```

If you have a `docstrip.cfg` that configures and enables `docstrip`'s TDS installing feature, then some files can already be in the right place, see the documentation of `docstrip`.

## 3.4   Refresh file name databases

If your TeX distribution (TeX Live, MiKTeX, …) relies on file name databases, you must refresh these. For example, TeX Live users run `texhash` or `mktexlsr`.

## 3.5   Some details for the interested

**Unpacking with LaTeX.**   The `.dtx` chooses its action depending on the format:

**plain TeX:** Run `docstrip` and extract the files.

**LaTeX:** Generate the documentation.

If you insist on using LaTeX for `docstrip` (really, `docstrip` does not need LaTeX), then inform the autodetect routine about your intention:

```
latex \let\install=y\input{classlist.dtx}
```

Do not forget to quote the argument according to the demands of your shell.

**Generating the documentation.**   You can use both the `.dtx` or the `.drv` to generate the documentation. The process can be configured by the configuration file `ltxdoc.cfg`. For instance, put this line into this file, if you want to have A4 as paper format:

```
\PassOptionsToClass{a4paper}{article}
```

An example follows how to generate the documentation with pdfLaTeX:

```
pdflatex classlist.dtx
makeindex -s gind.ist classlist.idx
pdflatex classlist.dtx
makeindex -s gind.ist classlist.idx
pdflatex classlist.dtx
```

# 4   History

## [2005/06/19 v1.0]

- First published version: CTAN and newsgroup comp.text.tex: "Re: Finding the Document Class"[2]

## [2005/06/19 v1.1]

- After `\documentclass` the package looks at `\@filelist` instead of aborting with error.

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[2]Url: https://groups.google.com/group/comp.text.tex/msg/8ee9523c2dc13666

## [2006/02/20 v1.2]

- DTX framework.
- Fix for `\@@fileswith@pti@ns`.

## [2008/08/11 v1.3]

- Code is not changed.
- URLs updated.

## [2011/10/17 v1.4]

- Documentation fix: `\MainClass` → `\MainClassName`.

## [2016/05/16 v1.5]

- Documentation updates.

# 5 Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; plain numbers refer to the code lines where the entry is used.