

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.

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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.

```
\ClassList → \ClassListEntry{myarticle}{a4paper}{}{}
                                \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 implemenation 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      }%
25    }%
26  }%
27  \ifx\@ifundefined\@ifundefined{%
28    \def\@ifundefined#1#2{\ifx#1#2\relax\@ne\else\@ne\fi}%
29  }%
30  \ifx\@tempcnta\@tempcntb{%
31    \def\@tempcnta{\@tempcntb}%
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299 }%
299 }
```

```

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 \one@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 CTAN¹:

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

[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](#)

TDS refers to the standard “A Directory Structure for T_EX Files” ([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 T_EX:

```
tex classlist.dtx
```

¹[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 L^AT_EX. The `.dtx` chooses its action depending on the format:

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

L^AT_EX: Generate the documentation.

If you insist on using L^AT_EX for `docstrip` (really, `docstrip` does not need L^AT_EX), 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 pdfL^AT_EX:

```
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.

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

[2006/02/20 v1.2]

- DTX framework.
- Fix for \@@files with @ptions.

[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.

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