

The classlist package

Heiko Oberdiek*
<heiko.oberdiek at googlemail.com>

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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 implementation 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@opti@ns\@fileswith@opti@ns
9 \def\@fileswith@opti@ns#1[#2]#3[#4]{%
#1: \@clsextension
#2: options of \documentclass/\LoadClass
#3: class name
#4: requested version
10 \ifx#1\@clsextension
11 \@if@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@ptions{#1}{#2}{#3}{#4}%
28 }%
29 \let\@@fileswith@ptions\@fileswith@ptions
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 \end{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:tds/tds.pdf](#)). 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
```

Script installation. Check the directory `TDS:scripts/oberdiek/` for scripts that need further installation steps. Package `attachfile2` comes with the Perl script `pdfatfi.pl` that should be installed in such a way that it can be called as `pdfatfi`. Example (linux):

```
chmod +x scripts/oberdiek/pdfatfi.pl
cp scripts/oberdiek/pdfatfi.pl /usr/local/bin/
```

¹<http://ctan.org/pkg/classlist>

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
```

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 (te \TeX , mik \TeX , ...) relies on file name databases, you must refresh these. For example, te \TeX 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 pdf \LaTeX :

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

4 Catalogue

The following XML file can be used as source for the [\$\TeX\$ Catalogue](#). The elements `caption` and `description` are imported from the original XML file from the Catalogue. The name of the XML file in the Catalogue is `classlist.xml`.

```
103 (*catalogue)
104 <?xml version='1.0' encoding='us-ascii'?>
105 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
106 <entry datestamp='$Date$' modifier='$Author$' id='classlist'>
```

```

107 <name>classlist</name>
108 <caption>Record classes used in a document.</caption>
109 <authorref id='auth:oberdiek' />
110 <copyright owner='Heiko Oberdiek' year='2005,2006,2008,2011' />
111 <license type='lppl1.3' />
112 <version number='1.5' />
113 <description>
114   Load this package before \documentclass:
115   <p/>
116   &nbsp;&nbsp;&nbsp;&nbsp;<tt>\RequirePackage{classlist}</tt><br/>
117   &nbsp;&nbsp;&nbsp;&nbsp;<tt>\documentclass[some,options]{whatever}</tt>
118   <p/>
119   After doing this, <tt>\MainClass</tt> contains the name of the
120   first loaded class, <tt>\ClassList</tt> contains a set of triples
121   &lt;class name&gt;, &lt;options directly requested&gt;, and
122   &lt;version requested&gt;. (The package may also be loaded after
123   <tt>\documentclass</tt>, in which case some information is not
124   available.)
125   <p/>
126   The package is part of the <xref refid='oberdiek'>oberdiek</xref>
127   bundle.
128 </description>
129 <documentation details='Package documentation'
130   href='ctan:/macros/latex/contrib/oberdiek/classlist.pdf' />
131 <ctan file='true' path='/macros/latex/contrib/oberdiek/classlist.dtx' />
132 <miktex location='oberdiek' />
133 <texlive location='oberdiek' />
134 <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip' />
135 </entry>
136 </catalogue>

```

5 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.

[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`.

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

