

The classlist package

Heiko Oberdiek
<heiko.oberdiek at gmail.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>

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   [2011/10/17 v1.4 Record classes used in a document (H0)]
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@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 </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 \TeX 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[ftp://ftp.ctan.org/tex-archive/](http://ftp.ctan.org/tex-archive/)

3.3 Package installation

Unpacking. The `.dtx` file is a self-extracting `docstrip` archive. The files are extracted by running the `.dtx` through plain $\mathrm{T}_{\mathrm{E}}\mathrm{X}$:

```
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 $\mathrm{T}_{\mathrm{E}}\mathrm{X}$ distribution (`te $\mathrm{T}_{\mathrm{E}}\mathrm{X}$` , `mik $\mathrm{T}_{\mathrm{E}}\mathrm{X}$` , ...) relies on file name databases, you must refresh these. For example, `te $\mathrm{T}_{\mathrm{E}}\mathrm{X}$` users run `texhash` or `mktextlsr`.

3.5 Some details for the interested

Attached source. The PDF documentation on CTAN also includes the `.dtx` source file. It can be extracted by AcrobatReader 6 or higher. Another option is `pdftk`, e.g. unpack the file into the current directory:

```
pdftk classlist.pdf unpack_files output .
```

Unpacking with $\mathrm{L}^{\mathrm{A}}\mathrm{T}_{\mathrm{E}}\mathrm{X}$. The `.dtx` chooses its action depending on the format:

plain $\mathrm{T}_{\mathrm{E}}\mathrm{X}$: Run `docstrip` and extract the files.

$\mathrm{L}^{\mathrm{A}}\mathrm{T}_{\mathrm{E}}\mathrm{X}$: Generate the documentation.

If you insist on using $\mathrm{L}^{\mathrm{A}}\mathrm{T}_{\mathrm{E}}\mathrm{X}$ for `docstrip` (really, `docstrip` does not need $\mathrm{L}^{\mathrm{A}}\mathrm{T}_{\mathrm{E}}\mathrm{X}$), 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 $\mathrm{L}^{\mathrm{A}}\mathrm{T}_{\mathrm{E}}\mathrm{X}$` :

```
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 [T_EX 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='1.4'>/>
113   <description>
114     Load this package before \documentclass:
115     <p>
116       &nbsp;&nbsp;&nbsp;<tt>\RequirePackage{classlist}</tt><br>
117       &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>;, &lt;options directly requested>;, and
122       &lt;version requested>;. (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`.

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

[2008/08/11 v1.3]

- Code is not changed.
- URLs updated.

[2011/10/17 v1.4]

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

6 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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