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.

```
\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

```
⟨*package⟩
```

Package identification.

```
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{classlist}%
  [2016/05/16 v1.5 Record classes used in a document (HO)]
```

```
\let\ClassList\@empty
\let\MainClassName\relax
```

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

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

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

```
  \ifx#1\@clsextension
    \@ifl@aded#1{#3}{%
      \PackageInfo{classlist}{%
        Skipping class `#3', because\MessageBreak
        this class is already loaded%
      }%
    }{%
      \@ifundefined{MainClassName}{%
        \def\MainClassName{#3}%
      }{}%
      \@temptokena\expandafter{%
        \ClassList
        \ClassListEntry{#3}{#2}{#4}%
      }%
    \edef\ClassList{\the\@temptokena}%
   }%
  \fi
  \CL@org@fileswith@pti@ns{#1}[{#2}]{#3}[{#4}]%
 }%
 \let\@@fileswith@pti@ns\@fileswith@pti@ns
\else
```

Called after \documentclass.

```
 \PackageInfo{classlist}{Use \string\@filelist\space method}%

 \let\ClassListEntry\relax
 \expandafter\def\expandafter\CL@test
   \expandafter#\expandafter1\@clsextension#2\@nil{%
  \ifx\\#2\\%
```

Name does not contain \@clsextension

```
  \else
   \expandafter\CL@test@i\CL@entry\@nil
  \fi
 }%
 \expandafter\def\expandafter\CL@test@i
   \expandafter#\expandafter1\@clsextension#2\@nil{%
  \ifx\\#2\\%
   \@ifundefined{opt@\CL@entry}{%
   }{%
    \@ifundefined{MainClassName}{%
     \let\MainClassName\CL@entry
    }{%
    }%
    \edef\ClassList{%
     \ClassList
     \ClassListEntry{\CL@entry}{}{}%
    }%
   }%
  \else
```

Names with more than one \@clsextension are not supported.

```
  \fi
 }%
 \@for\CL@entry:=\@filelist\do{%
  \expandafter\expandafter\expandafter\CL@test\expandafter
    \CL@entry\@clsextension\@nil
 }%
\fi
```

\PrintClassListEntry

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

\PrintClassListTitle

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

\PrintClassList

```
\providecommand*{\PrintClassList}{%
 \begingroup
  \let\ClassListEntry\PrintClassListEntry
  \PrintClassListTitle
  \ClassList
 \endgroup
}
```

\CL@InfoEntry

```
\def\CL@InfoEntry#1#2#3{%
  \advance\count@ by \@ne
  \def\x{#2}%
  \@onelevel@sanitize\x
  \edef\CL@Info{%
    \CL@Info
    \noexpand\MessageBreak
    (\the\count@) %
    #1 [\x]%
    \ifx\\#3\\%
    \else
      \space[#3]% hash-ok
    \fi
  }%
}
```

```
\AtBeginDocument{%
  \begingroup
    \count@=\z@
    \def\CL@Info{Class List:}%
    \let\ClassListEntry\CL@InfoEntry
    \ClassList
    \let\on@line\@empty
    \PackageInfo{classlist}{\CL@Info}%
  \endgroup
}
```

```
⟨/package⟩
```

3 Installation

3.1 Download

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

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] 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 (teTeX, mikTeX, …) relies on file name databases, you must refresh these. For example, teTeX 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 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.

```
⟨*catalogue⟩
<?xml version='1.0' encoding='us-ascii'?>
<!DOCTYPE entry SYSTEM 'catalogue.dtd'>
<entry datestamp='$Date$' modifier='$Author$' id='classlist'>
```

```
  <name>classlist</name>
  <caption>Record classes used in a document.</caption>
  <authorref id='auth:oberdiek'/>
  <copyright owner='Heiko Oberdiek' year='2005,2006,2008,2011'/>
  <license type='lppl1.3'/>
  <version number='1.5'/>
  <description>
    Load this package before \documentclass:
    <p/>
    &nbsp;&nbsp;<tt>\RequirePackage{classlist}</tt><br/>
    &nbsp;&nbsp;<tt>\documentclass[some,options]{whatever}</tt>
    <p/>
    After doing this, <tt>\MainClass</tt> contains the name of the
    first loaded class, <tt>\ClassList</tt> contains a set of triples
    &lt;class name&gt;, &lt;options directly requested&gt;, and
    &lt;version requested&gt;.  (The package may also be loaded after
    <tt>\documentclass</tt>, in which case some information is not
    available.)
    <p/>
    The package is part of the <xref refid='oberdiek'>oberdiek</xref>
    bundle.
  </description>
  <documentation details='Package documentation'
      href='ctan:/macros/latex/contrib/oberdiek/classlist.pdf'/>
  <ctan file='true' path='/macros/latex/contrib/oberdiek/classlist.dtx'/>
  <miktex location='oberdiek'/>
  <texlive location='oberdiek'/>
  <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'/>
</entry>
⟨/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.

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

[2016/05/16 v1.5]

- Documentation updates.

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.