The \texttt{stdclsdv} package\footnote{This file has version number v1.0, last revised 1999/01/17.}

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1999/01/17

Abstract
The \texttt{stdclsdv} package is intended to be used by the authors of \LaTeX\ packages that need to know about the sectional divisions provided by the document class.

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1 Introduction
Several packages need to know the kind of sectional divisions provided by the document class.

The \texttt{stdclsdv} package provides a solution for the case when the document class is one of the \LaTeX\ standard classes (i.e., \texttt{book}, \texttt{report}, \texttt{article}, \texttt{letter}, \texttt{slides}, and classes derived from the \texttt{article} class, namely \texttt{ltxdoc} and \texttt{proc}).

This manual is typeset according to the conventions of the \LaTeX\ \texttt{docstrip} utility which enables the automatic extraction of the \LaTeX\ macro source files \cite{GMS94}.

Section 2 describes the usage of the package. Commented source code for the package is in Section 3.

2 The \texttt{stdclsdv} package

The \texttt{stdclsdv} package provides several \texttt{\if...} macros which can be used to determine the kinds of sectional divisions supported by the current (standard) \texttt{documentclass}.

\texttt{\if...} macros...
The package is designed to work with the standard \LaTeX{} document classes book, report, article, proc and \texttt{ltxdoc} class (which is based to a large extent on the article class).

\ifSCDknownclass
\ifSCDknownclass is TRUE iff the document class is one of: book, report, article, letter, slides, proc, or \texttt{ltxdoc}. Otherwise it is FALSE.
\fi
\fi

\ifSCDchapter
\ifSCDchapter is TRUE iff the document class defines a \texttt{chapter} sectional division, otherwise it is FALSE.
\fi
\fi

\ifSCDpart
\ifSCDpart is TRUE iff the document class defines a \texttt{part} sectional division, otherwise it is FALSE.
\fi
\fi

\ifSCDsection
\ifSCDsection is TRUE iff the document class defines a \texttt{section} sectional division, otherwise it is FALSE.
\fi
\fi

\ifSCDnodivs
\ifSCDnodivs is TRUE iff the document class has neither \texttt{part} nor \texttt{chapter} nor \texttt{section} divisions, otherwise it is FALSE.
\fi
\fi

\SCDquit
If the document class or divisioning is not handled by a package, it can be useful to skip all further package code. This can be done using:

\begin{verbatim}
... \\
\ifSCDknownclass \\
% normal processing \\
else % just before end of package file \\
% error/warning message about unknown class \\
\fi \\
\endinput
\end{verbatim}

The \texttt{\SCDquit} macro is defined to do nothing. It is intended to be used for prematurely ending a package file in the following manner:

\begin{verbatim}
\ifSCDknownclass\else \\
\renewcommand{\SCDquit}{\endinput} \\
% error/warning message about unknown class \\
\fi \\
SCDquit % ends the file iff the class is unknown \\
% normal processing \\
... \\
\endinput
\end{verbatim}

\texttt{\SCDCheckCommand} takes the same arguments as \texttt{\newcommand}, that is:

\begin{verbatim}
\SCDCheckCommand{⟨command⟩}{⟨nargs⟩}{⟨defarg⟩}{⟨definition⟩}
\end{verbatim}

\texttt{\SCDCheckCommand} is identical to the kernel \texttt{\CheckCommand} (see \texttt{ltxdefns.dtx}) except that it sets \texttt{\ifSCDSameDefinition} to TRUE iff the definition given in \texttt{\SCDCheckCommand} is the same as the current definition, otherwise \texttt{\ifSCDSameDefinition} is set to FALSE. (\texttt{\CheckCommand} issues a warning if the definitions are different).

3 The package code

Announce the name and version of the package, which requires \LaTeX{} 2ε.

1 \NeedsTeXFormat{LaTeX2e}

2 \ProvidesPackage{stdclsdv}[1999/01/18 v1.0 Sectional divisions]
In order to try and avoid name clashes with other packages, each macro name includes the character string \texttt{SCD} (Standard Class Division).

These are used when we need to decide what sectional divisions are supported by the document’s class. We will assume an unknown class that has \texttt{part} and \texttt{section} but not \texttt{chapter} divisions.

\begin{verbatim}
\ifSCDknownclass
  \ifSCDpart\SCDparttrue
  \ifSCDchapter\SCDchapterfalse
  \ifSCDsection\SCDsectiontrue
  \ifSCDnodivs\SCDnodivsfalso
\fi
\\@ifclassloaded{book}{\SCDknownclasstrue\SCDchaptertrue}{}
\@ifclassloaded{report}{\SCDknownclasstrue\SCDchaptertrue}{}
\@ifclassloaded{article}{\SCDknownclasstrue}{}
\@ifclassloaded{proc}{\SCDknownclasstrue}{}
\@ifclassloaded{ltxdoc}{\SCDknownclasstrue}{}
\@ifclassloaded{slides}{\SCDknownclasstrue\SCDnodivstrue\SCDpartfalse\SCDsectionfalse}{}
\@ifclassloaded{letter}{\SCDknownclasstrue\SCDnodivstrue\SCDpartfalse\SCDsectionfalse}{}
\fi
\\ifSCDknownclass\else
  \SCDnodivsfalso
  \if\part\undefined\SCDpartfalse
  \else\fi
  \if\chapter\undefined\SCDchaptertrue \SCDnodivsfalso
  \fi
  \if\section\undefined
    \SCDsectionfalse
  \else
    \SCDnodivsfalso
  \fi
\fi
\end{verbatim}

Check the actual class.\footnote{Thanks to David Carlisle for information on how to check on the class.}

If the class is not one of the standard classes, check if \texttt{part} or \texttt{chapter} or \texttt{section} headings are provided.

\begin{verbatim}
\ifSCDknownclass\else
  \SCDnodivsfalso
  \if\part\undefined \SCDpartfalse
  \else \fi
  \if\chapter\undefined \SCDchaptertrue \SCDnodivsfalso
  \else \fi
  \if\section\undefined
    \SCDsectionfalse
  \else
    \SCDnodivsfalso
  \fi
\fi
\end{verbatim}

\texttt{SCDquit} A macro that does nothing (see §2 for its intended usage).

\texttt{\ifSCDSameDefinition} Used to store the result of \texttt{SCDCheckCommand}. TRUE iff the command has the given definition.

\texttt{\SCDCheckCommand} This is identical to the kernal \texttt{CheckCommand} except that it sets the \texttt{\ifSCDSameCommand} flag rather than issuing a warning. See \texttt{ltdefns.dtx} for the coding for \texttt{CheckCommand}.\footnote{Thanks to David Carlisle for information on how to check on the class.}
\def\SCDCheckCommand\@star@or@long \% changed from CheckCommand
\@onlypreamble\SCDCheckCommand
\def\@SCD@check@command#1#2#{\@SCD@check@c#1{#2}}
\@onlypreamble\@SCD@check@command
\long\def\@SCD@check@c#1#2#3{% 
\expandafter\let\csname\string\reserved@a\endcsname\relax
\renew@command\reserved@a#2{#3}%
@ifundefined{\string\reserved@a}\
{\@SCD@check@eq\reserved@a}
{\expandafter\@SCD@check@eq
\csname\string#1\expandafter\endcsname
\csname\string\reserved@a\endcsname}}
\@onlypreamble\@SCD@check@c
\def\@SCD@check@eq#1#2{% 
\ifx#1#2\else
\SCDSameDefinitionfalse % changed from CheckCommand
\fi
\} \@onlypreamble\@SCD@check@eq

The end of this package.

References


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Numbers written in italic refer to the page where the corresponding entry is described, the ones underlined to the code line of the definition, the rest to the code lines where the entry is used.

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