

The `stdclsdv` package^{*}

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Abstract

The `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.

Contents

1	Introduction	1
2	The <code>stdclsdv</code> package	2
3	The package code	3

1 Introduction

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

The `stdclsdv` package provides a solution for for the case when the document class is one of the \LaTeX standard classes (i.e., `book`, `report`, `article`, `letter`, `slides`, and classes derived from the `article` class, namely `ltxdoc` and `proc`). It also handles the `koma` classes.¹

This manual is typeset according to the conventions of the \LaTeX `DOCSTRIP` utility which enables the automatic extraction of the \LaTeX macro source files [GMS94].

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

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[†]This work was originally performed as a Guest Researcher at the National Institute of Standards and Technology.

¹Courtesy of Joerg Jaspert `Joerg.Jaspert@informatik.fh-fulda.de`.

2 The stdclsdv package

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

The package is designed to work with the standard L^AT_EX document classes `book`, `report`, `article`, `letter`, `slides`, `proc`, `ltxdoc`, `scrbook`, `scrreprt`, `scrartcl` or `scrlettr`. Otherwise it is `FALSE`.

`\ifSCDknownclass` `\ifSCDknownclass` is TRUE iff the document class is one of: `book`, `report`, `article`, `letter`, `slides`, `proc`, `ltxdoc`, `scrbook`, `scrreprt`, `scrartcl` or `scrlettr`. Otherwise it is `FALSE`.

`\ifSCDchapter` `\ifSCDchapter` is TRUE iff the document class defines a `\chapter` sectional division, otherwise it is `FALSE`.

`\ifSCDpart` `\ifSCDpart` is TRUE iff the document class defines a `\part` sectional division, otherwise it is `FALSE`.

`\ifSCDsection` `\ifSCDsection` is TRUE iff the document class defines a `\section` sectional division, otherwise it is `FALSE`.

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

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

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

Alternatively, using the `\SCDQuit` command provides a clearer means of accomplishing this. The `\SCDQuit` macro is defined to do nothing. It is intended to be used for prematurely ending a package file in the following manner:

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

`\SCDCheckCommand` `\SCDCheckCommand` takes the same arguments as `\newcommand`, that is:

`\ifSCDSameDefinition` `\SCDCheckCommand{<command>}[<nargs>][<defarg>]{<definition>}`
`\SCDCheckCommand` is identical to the kernel `\CheckCommand` (see `ltxdefns.dtx`) except that it sets `\ifSCDSameDefinition` to TRUE iff the definition given in

`\SCDCheckCommand` is the same as the current definition, otherwise `\ifSCDSameDefinition` is set to FALSE. (`\CheckCommand` issues a warning if the definitions are different).

3 The package code

Announce the name and version of the package, which requires L^AT_EX 2_ε.

```
1 \usc
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{stdclsdv}[2009/09/04 v1.1a Sectional divisions]
```

In order to try and avoid name clashes with other packages, each macro name includes the character string SCD (Standard Class Division).

<pre>\ifSCDknownclass \ifSCDpart \ifSCDchapter \ifSCDsection \ifSCDnodivs</pre>	<p>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 <code>\part</code> and <code>\section</code> but not <code>\chapter</code> divisions.</p> <pre>4 \newif\ifSCDknownclass\SCDknownclassfalse 5 \newif\ifSCDpart\SCDparttrue 6 \newif\ifSCDchapter\SCDchapterfalse 7 \newif\ifSCDsection\SCDsectiontrue 8 \newif\ifSCDnodivs\SCDnodivsfalse</pre>
---	--

Check the actual class.²

```
9 \@ifclassloaded{book}{\SCDknownclasstrue\SCDchaptertrue}{}
10 \@ifclassloaded{report}{\SCDknownclasstrue\SCDchaptertrue}{}
11 \@ifclassloaded{article}{\SCDknownclasstrue}{}
12 \@ifclassloaded{proc}{\SCDknownclasstrue}{}
13 \@ifclassloaded{ltxdoc}{\SCDknownclasstrue}{}
14 \@ifclassloaded{slides}{\SCDknownclasstrue
15     \SCDnodivstrue\SCDpartfalse\SCDsectionfalse}{}
16 \@ifclassloaded{letter}{\SCDknownclasstrue
17     \SCDnodivstrue\SCDpartfalse\SCDsectionfalse}{}

```

Joerg Jaspert supplied, via Email on 2000/07/16, the following code for the koma classes.

```
18 \@ifclassloaded{scrbook}{\SCDknownclasstrue\SCDchaptertrue}{}
19 \@ifclassloaded{scrreprt}{\SCDknownclasstrue\SCDchaptertrue}{}
20 \@ifclassloaded{scrartcl}{\SCDknownclasstrue}{}
21 \@ifclassloaded{scrletter}{\SCDknownclasstrue
22     \SCDnodivstrue\SCDpartfalse\SCDsectionfalse}{}

```

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

```
23 \ifSCDknownclass\else
24   \SCDnodivstrue
25   \ifx\part\undefined
26     \SCDpartfalse
27   \else

```

²Thanks to David Carlisle for information on how to check on the class.

```

28   \SCDnodivsfalse
29 \fi
30 \ifx\chapter\undefined\else
31   \SCDchaptertrue \SCDnodivsfalse
32 \fi
33 \ifx\section\undefined
34   \SCDsectionfalse
35 \else
36   \SCDnodivsfalse
37 \fi
38 \fi

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

\ifSCDSameDefinition Used to store the result of \SCDCheckCommand. TRUE iff the command has the
given definition.
40 \newif\ifSCDSameDefinition

\SCDCheckCommand This is identical to the kernal \CheckCommand except that it sets the \ifSCDSameCommand
flag rather than issuing a warning. See ltdefns.dtx for the coding for
\CheckCommand.
41 \def\SCDCheckCommand{\@star@or@long%
42   \SCDSameDefinitiontrue%          changed from CheckCommand
43   \@SCD@check@command}
44   \@onlypreamble\SCDCheckCommand

\@SCD@check@command
45 \def\@SCD@check@command#1#2#{\@SCD@check@c#1{#2}}
46   \@onlypreamble\@SCD@check@command

\@SCD@check@c
47 \long\def\@SCD@check@c#1#2#3{%
48   \expandafter\let\csname\string\reserved@a\endcsname\relax
49   \renew@command\reserved@a#2{#3}%
50   \@ifundefined{\string\reserved@a}%
51     {\@SCD@check@eq#1\reserved@a}%
52     {\expandafter\@SCD@check@eq
53       \csname\string#1\expandafter\endcsname
54       \csname\string\reserved@a\endcsname}}
55   \@onlypreamble\@SCD@check@c

\@SCD@check@eq
56 \def\@SCD@check@eq#1#2{%
57   \ifx#1#2\else
58     \SCDSameDefinitionfalse % changed from CheckCommand
59   \fi}
60   \@onlypreamble\@SCD@check@eq

The end of this package.
61 \</usc>

```

References

- [GMS94] Michel Goossens, Frank Mittelbach, and Alexander Samarin. *The LaTeX Companion*. Addison-Wesley Publishing Company, 1994.