Producing proceedings articles with $\LaTeX 2_{\varepsilon}^*$

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This file is maintained by the LATEX Project team. Bug reports can be opened (category latex) at https://latex-project.org/bugs.html.

1 Description

This IATEX 2_{ε} document class is designed to produce camera-ready conference proceedings. It is based upon the document class article, but modifies some of its layout decisions. It also adds one command.

For compatibility with \LaTeX 2.09 a .sty version is provided because proc used to be a style file. The .sty file can *not* be used as a package however.

\copyrightspace

The \copyrightspace command is used to produce a blank space in the first column where a copyright notice belongs. Note that it should appear after any \footnote commands that produce footnotes for the first column.

2 The DOCSTRIP modules

The following modules are used in the implementation to direct DOCSTRIP in generating the external files:

class produce the proc document class sty produce proc.sty for compatibility mode driver produce a documentation driver file

3 Implementation

In this case a check is needed to see wether LATEX 2ε runs in compatibility mode.

- $_1$ (*style)
- 2 \if@compatibility

In this case processing silently continues, but in the **\else** case a warning is issued and reading of this file stops.

3 \else

 $^{^*}$ File version v1.3l, dated 2014/09/29

```
\ClassWarningNoLine{proc}{^^J\@spaces%
4
      You requested the use of 'proc' as a package^^J\@spaces%
      but it has been turned into a document class.^^J\@spaces%
      Please change your file to use 'proc' as a class.^^J}
   \expandafter\endinput
9 \fi
10 (/style)
   Paper sizes smaller than A4 are not supported.
11 (*class)
12 \DeclareOption{a5paper}
      {\ClassError{proc}{Option 'a5paper' not supported}{}}
14 \DeclareOption{b5paper}
      {\ClassError{proc}{Option 'b5paper' not supported}{}}
   Also the onecolumn option is disabled in this document class.
16 \DeclareOption{onecolumn}%
      {\ClassError{proc}{Option 'onecolumn' not supported}{}}
   Proceedings articles never have separate titlepages, therefore this option is
disabled.
18 \DeclareOption{titlepage}%
      {\ClassError{proc}{Option 'titlepage' not supported}{}}
   Always print in two column mode.
20 \PassOptionsToClass{twocolumn}{article}
   Any other options are passed on to the article class on which this document
class is based.
21 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{article}}
   Now we can process the options
22 \ProcessOptions
   and load the article document class.
23 \LoadClass{article}
24 (/class)
```

4 Document Layout

Proceedings articles have a different layout than normal articles. Therefore some of the layout parameters are given different values here.

4.1 Page Layout

4.1.1 Vertical spacing

\footskip

The distance from the baseline of the box which contains the running footer to the baseline of last line of text is controlled by the \footskip.

```
25 \langle *class \mid style \rangle
26 \setlength\footskip{75\p0}
```

4.1.2 The dimension of text

\textwidth

When $\LaTeX 2_{\varepsilon}$ runs in compatibility mode it has to be made sure that the dimensions of the printed area are not different from what the user was used to see.

```
27 \if@compatibility
28 \setlength\textwidth{6.75in}
29 \else
30 \setlength\textwidth{\paperwidth}
31 \addtolength\textwidth{-126\p@}
32 \@settopoint\textwidth
33 \fi
```

Here the width of the text a little is modified to be a whole number of points.

```
34 \if@compatibility
35 \else
36 \@settopoint\textwidth
37 \fi
```

\textheight

Now that we have computed the width of the text, we have to take care of the height. The \textheight is the height of text (including footnotes and figures, excluding running head and foot).

```
38 \if@compatibility
   \setlength\textheight{9in}
39
40 \else
    \ifcase\@ptsize
41
      \setlength\textheight{53\baselineskip}
42
    \or
43
      \setlength\textheight{47\baselineskip}
44
45
    \or
46
      \setlength\textheight{44\baselineskip}
47
    \fi
48 \fi
```

The first line on the page has a height of \topskip.

49 \advance\textheight by \topskip

4.1.3 Margins

\oddsidemargin \evensidemargin

The width of the text is quite large, therefore the margins have a negative width.

 $50 \ensuremath{\mbox{\sc sidem}}\ensuremath{\mbox{\sc sidem}}\ensuremath$

51 \setlength\evensidemargin{-10\p0}

\marginparwidth

Because we have such a large **\textwidth** there is no real room for notes in the margins.

 $52 \sline {z@}$

\topmargin

The \topmargin is the distance between the top of 'the printable area' —which is 1 inch below the top of the paper— and the top of the box which contains the running head.

53 \setlength\topmargin{-47\p0}

\columnsep

Proceedings articles are always set in \twocolumn mode, therefore the distance between the two columns (\columnsep)is set to a non zero value.

54 \setlength\columnsep{.375in}

4.2 The page style

The user can use \markright (or \markboth) to put an identification in the lower left side of the page. The page number is printed in the lower right side of the page.

This works as long as he doesn't use either \pagestyle or \thispagestyle commands.

5 Document Markup

5.1 The title

\maketitle The definition of \maketitle here is basically the same as the one in the document class article, but the pagestyle is not set to plain.

```
60 \def\maketitle{\par
61 \begingroup
62 \renewcommand\thefootnote{\fnsymbol{footnote}}%
63 \def\@makefnmark{\rlap{\@textsuperscript{\normalfont\@thefnmark}}}%
64 \long\def\@makefntext##1{\parindent 1em\noindent
65 \hb@xt@1.8em{%
66 \hss\@textsuperscript{\normalfont\@thefnmark}}##1}%
```

This document class always uses two column mode but the title is set to the full width of the text.

```
67 \twocolumn[\@maketitle]%
68 \@thanks
69 \endgroup
70 \setcounter{footnote}{0}%
71 \let\maketitle\relax
72 \let\@maketitle\relax
73 \gdef\@thanks{}\gdef\@author{}\gdef\@title{}\let\thanks\relax}
```

\@maketitle This macro takes care of formatting the title information.

The information is set inside \vbox with a width of \textwidth and a height of 2.25in. The text is vertically and horizontally centered.

```
74 \def\@maketitle{%
   \vbox to 2.25in{%
75
    \hsize\textwidth
76
    \linewidth\hsize
77
78
    \vfil
    \centering
79
    {\LARGE \@title \par}
80
81
    \vskip 2em
82
    83
    \vfil}}
```

\copyrightspace

The \copyrightspace command is used to produce a blank space in the first column where a copyright notice belongs. It works by producing a blank footnote of the appropriate size.

```
84 \ensuremath{\mbox{def}\mbox{copyrightspace}}\%
```

 $85 \quad footnotetext[0]{\mbox{}}\vrule \eqref{eq:conditional}} \label{footnotetext}$

5.2 Modifying environments

5.2.1 Abstract

\abstract For this document class the definition of the abstract environment is quit simple.

```
86 \renewenvironment{abstract}%
```

87 {\section*{\abstractname}}

88 {\par}

6 Initialization

6.1 Words

\pagename

This document class is for documents prepared in the English language. To prepare a version for another language, one English word must be replaced. It is defined below in a command name.

89 \newcommand\pagename{Page}

 $90 \langle \text{/class} \mid \text{style} \rangle$