

The `acmconf` Class

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Typesetting Papers for Proceedings of the ACM

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Abstract

This class is used to typeset articles to be published in the proceedings of ACM (Association for Computing Machinery) conferences and workshops.

1 Introduction

The purpose of this class is to make the proceedings of the ACM to look more similar. The `acmconf` class is an extension (or restriction as one sees) of the standard `article` class. The text is typeset within two columns, the page bounds (width and height) are predefined and should not be modified. You may use all stuff of the `article` class in the `acmconf` class. (E.g. `\title`, `\author`, `\maketitle`, `\section`, `\tabular`, etc. Please have a look to the examples shipped with this class).

The layout produced by the `acmconf` class is based on the description contained in www.acm.org/sigs/pubs/proceed/pubform.doc¹. For the specification of the layout, have a look into the file `pubform.tex` (with is the $\text{\LaTeX}2\text{-}$ variant of `pubform.doc`).

The page www.acm.org/sigs/pubs/proceed/template.html contains the *ACM SIG Proceedings Templates* for some other word processors.

Besides the layout, this class offers some support in managing the process of preparing, submitting, and publishing the paper. The basic idea is that a paper is in one of the following five "states":

1. First the paper is in *preparation*, then it will be
2. *submitted* to the conference chair.
3. It may be *accepted*, but is not yet published in the proceedings,

¹It follows this document concerning fonts and sizes, etc., but some distances (e.g. before and after section heads), are taken unchanged from the `article` class, which results in differences to the file `pubform.doc`.

4. then it must be typeset for the *publication* in the proceedings, and sometimes you need a
5. *printout* of the published paper.

These states are indicated by the options passed to the class. Changing the option from one state to the next should not modify the printed result except for foot- and head lines (i.e. each page should contain the same material on the same position on the page). The options are `prepare`, `submit`, `accept`, `publish` and `print`. In the text we speak of the *prepared*, *submitted*, *accepted*, *published* or *printed* text, as an abbreviation, that text was processed by L^AT_EX with the corresponding option.

Depending on the state, the head- and foot line of a page are filled with various informations (see below). Except for `publish` the foot line contains the page number, starting with one.

Depending on the state, some macros must be used to define important informations (e.g. the conference name must be given always, while the copyright notice must be given only when the `publish` or `print` option is used. Warnings will be emitted, if they are missing.

You may give conditional text depending on the option, using the `\If...` commands shown below. Using them may cause different results when printing the text.

2 Thanks

The initial layout of this class was based on the former L^AT_EX-style file, which states:

Adapted from ARTICLE document style by Ken Traub. Hacked for [preprint] option by Olin Shivers 4/91. Fixed up for LaTeX version 2e by Peter Lee 10/94 (with help from Simon Peyton Jones).

The `flushend`-package of Sigitas Tolušis `sigitas@vtex.lt` is used to balance the columns on the last page of the paper. It is *Copyright 1997 Sigitas Tolušis, VTeX Ltd., Akademijos 4, Vilnius, Lithuania*. Its “home is `www.vtex.lt/tex/download/macros/flushend.sty`.

The `flushend`-package is distributed with the permission of Sigitas Tolušis together with the `acmconf` class. It is stored in the separate file `flushend.sty`.

3 User Interface

3.1 Options

All except the following options of the `article` class are allowed by `acmconf`.

- `10pt`
- `11pt`
- `12pt`

New options for `acmconf` are:

<code>prepare</code>	Paper in preparation (default option).
<code>submit</code>	Typeset paper for submission.
<code>accept</code>	Typeset accepted paper.
<code>publish</code>	Typeset accepted paper for publishing in the proceedings.
<code>print</code>	Typeset the published paper for printing separate from from the proceedings.
<code>box</code>	Place a box around the copyright notice (default).
<code>nobox</code>	Do not place a box around the copyright notice.

3.2 Commands

Additionally to the options, the following commands (macros) and environments may be used:

<code>\ConferenceName</code>	<ul style="list-style-type: none"> • <code>\ConferenceName{\langle ConferenceName \rangle}</code> defines the full name of the conference.
<code>\ConferenceShortName</code>	<ul style="list-style-type: none"> • <code>\ConferenceShortName{\langle ConferenceShortName \rangle}</code> defines the abbreviation of the conference name.
<code>\TheConferenceName</code>	<ul style="list-style-type: none"> • <code>\TheConferenceName</code> is the full name of the conference, defined by <code>\ConferenceName</code>.
<code>\TheConferenceShortName</code>	<ul style="list-style-type: none"> • <code>\TheConferenceShortName</code> is the full name of the conference, defined by <code>\ConferenceShortName</code>.
<code>\PrepareText</code>	<ul style="list-style-type: none"> • <code>\PrepareText{\langle PrepareText \rangle}</code> <code>\langle PrepareText \rangle</code> is printed on top of a first page of a prepared paper. Default: <i>Intended for submission to the \langle ConferenceName \rangle</i>
<code>\SubmitText</code>	<ul style="list-style-type: none"> • <code>\SubmitText{\langle SubmitText \rangle}</code> <code>\langle SubmitText \rangle</code> is printed on top of a first page of a submitted paper. Default: <i>Submitted to the \langle ConferenceName \rangle</i>
<code>\AcceptText</code>	<ul style="list-style-type: none"> • <code>\AcceptText{\langle AcceptText \rangle}</code> <code>\langle AcceptText \rangle</code> is printed on top of a first page of an accepted paper. Default: <i>Accepted for the \langle ConferenceName \rangle</i>
<code>\PrintText</code>	<ul style="list-style-type: none"> • <code>\PrintText{\langle PrintText \rangle}</code> <code>\langle PrintText \rangle</code> is printed on top of a first page of a prepared paper. Default: <i>Published in the Proceedings of the \langle ConferenceName \rangle, pages \langle Published-PageFrom \rangle–\langle PublishedPageTo \rangle</i>
<code>\PublishedPageFrom</code>	<ul style="list-style-type: none"> • <code>\PublishedPageFrom{\langle PublishedPageFrom \rangle}</code>
<code>\PublishedPageTo</code>	<ul style="list-style-type: none"> • <code>\PublishedPageTo{\langle PublishedPageTo \rangle}</code> The published paper is printed in the proceedings from page <code>\langle Published-PageFrom \rangle</code> to page <code>\langle PublishedPageTo \rangle</code>.
<code>\CopyrightText</code>	<ul style="list-style-type: none"> • <code>\CopyrightText{\langle CopyrightText \rangle}</code> <code>\langle CopyrightText \rangle</code> must be given for the accepted, published and printed paper. It may be given for the prepared and submitted paper. It is printed below the left column on the first page.
<code>\IfPrepare</code>	<ul style="list-style-type: none"> • <code>\IfPrepare{\langle then \rangle}{\langle else \rangle}</code> executes <code>\langle then \rangle</code>, if the <code>prepare</code> option was given, otherwise executes <code>\langle else \rangle</code>.

- `\IfSubmit` • `\IfSubmit{<then>}{<else>}` executes *<then>*, if the `submit` option was given, otherwise executes *<else>*.
 - `\IfAccept` • `\IfAccept{<then>}{<else>}` executes *<then>*, if the `accept` option was given, otherwise executes *<else>*.
 - `\IfPublish` • `\IfPublish{<then>}{<else>}` executes *<then>*, if the `publish` option was given, otherwise executes *<else>*.
 - `\IfPrint` • `\IfPrint{<then>}{<else>}` executes *<then>*, if the `print` option was given, otherwise executes *<else>*.
 - `\Author` • `\Author{<Author>}`
is used to typeset the auther(s) in the title.
 - `\Address` • `\Address{<Address>}`
is used to typeset the authors postal address in the title.
 - `\Phone` • `\Phone{<Phone>}`
is used to typeset the authors phone number in the title.
 - `\Email` • `\Email{<Email>}`
is used to typeset the authors email address in the title.
- `\Author`, `\Address`, `\Phone`, and `\Email` should be used only withing the standard `\author`-command, used to produce the title section of the paper
- The first given *<Author>* is printed with the *<ConferenceShortName>* and the `\date` in the foot line of the submitted paper².
- `keywords` • The `keywords` environment has no parameters and should follow the `abstract` environment. It is used to give some keywords of the article.

All macros above except `\If . . .`, `\ConferenceName`, `\ConferenceShortName`, `\Author`, `\Address`, and `\Email` must be given in the preamble of the document.

The following two section commands are defined additionally:

`\subsubsection`
`\subsubsubsection` `\subsubsubsection` and `\subsubsubsubsection`. They may be used as the other `\section`-commands.

`\tableofcontents`
`\listoffigures`
`\listoftables`
`\pagestyle` The following commands provided by the `article` class are not allowed in `acmconf`, except when preparing the text: `\tableofcontents`, `\listoffigures`, `\listoftables`, and `\pagestyle`.

3.3 Commands of the flushend-package

The `flushend` package of Sigitas Tolušis `sigitas@vtex.lt` is used to balance the columns on the last page of the paper. It is loaded automatically by the `acmconf` class. It offers the following commands:

- `\flushend` • `\flushend`
Switches on column balancing at last. This is the default.
- `\raggedend` • `\raggedend`
Switches off column balancing at last page.
- `\atColsBreak` • `\atColsBreak{<text>}`
Adds *<text>* in place of original column break (without balancing). Example: `\atColsBreak{\vskip-2pt}`.

`\showcolsendrule`

- `\showcolsendrule`
Adds rule to the bottom of columns (just for debugging).

3.4 Predefined Stuff

`acmconf` defines the following things, which should not be overwritten by the user:

- The paper is set in `twocolumn-mode`. The columns on the last page are balanced.
- The `\normalfont` size is 9pt with a `\baselineskip` of 9pt and a `\baselinestretch` of 1.2.
- The page size and some distances.
- The layout of `\section`, `\subsection`, `\subsubsection`, `\paragraph`, and `\subparagraph`.

4 Example

```
\documentclass[print]{acmconf}
\ConferenceName{1.~Conference on Designing a \LaTeX2e Class for
  Typesetting ACM Papers, Hawaii 2000}
\ConferenceShortName{CONF-2000}
\CopyrightText{\copyright ACM 2000, ....}
\PublishedPageFrom{123}
\PublishedPageTo{456}
\begin{document}
\date{May 18, 2000; Version 1.3}
\title{A New Intuitionistic Proof of Usability\
  of the Recommended Style File for the ACM Conference Papers}
\author{\Author{J\"urgen Vollmer}\
  \Address{Karlsruhe}\
  \Email{Juergen.Vollmer@acm.org}\
  \and
  \Author{Mickey Mouse}\
  \Address{Enthausen University}\
  \Email{Mickey.Mouse@entenhausen.org}
}
\maketitle
\begin{abstract}
  This document demonstrates how to use the \LaTeX2e \verb|acmconf|
  ....
\end{abstract}

\begin{keywords}
\LaTeX2e, ACM proceedings
\end{keyowrds}
\section{Introduction}
To understand this file read the \emph{source} and not the typeset
....
\end{document}
```

²To ease the job of the referee, in case a thunderstorm visits his office.

5 Copyright and License

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Juergen.Vollmer@acm.org

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If you find this software useful, please send me a postcard.

The `flushend`-package is Copyright (©) 1997, Sigitas Tolušis, VTeX Ltd., Akademijos 4, Vilnius, Lithuania. `sigitas@vtex.lt`.

Change History

v1.0	General: The initial version. 1	nobox options. 1	v1.3
v1.1	General: Adopted to rules as given shown in the file <code>pubform.tex</code> 1	General: Avoid superfluous spaces. Thanks to Henning Niss (<code>hniss@diku.dk</code>) 1	
v1.2	General: Added the box and		

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Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in **roman** refer to the code lines where the entry is used.

A		I	
<code>\AcceptText</code> 3		<code>\IfAccept</code> 4	
<code>\Address</code> 4		<code>\IfPrepare</code> 3	
<code>\atColsBreak</code> 4		<code>\IfPrint</code> 4	
<code>\Author</code> 4		<code>\IfPublish</code> 4	
		<code>\IfSubmit</code> 4	
C		K	
<code>\ConferenceName</code> 3		<code>keywords</code> (environment) 4	
<code>\ConferenceShortName</code> 3			
<code>\CopyrightText</code> 3			
E		L	
<code>\Email</code> 4		<code>\listoffigures</code> 4	
environments:keywords		<code>\listoftables</code> 4	
<code>keywords</code> 4			
F		P	
<code>\flushend</code> 4		<code>\pagestyle</code> 4	
		<code>\Phone</code> 4	
		<code>\PrepareText</code> 3	

\PrintText	3	\SubmitText	3
\PublishedPageFrom	3	\subsubsection	4
\PublishedPageTo	3	\subsubsection	4
R		T	
\raggedend	4	\tableofcontents	4
S		TheConferenceName	
\showcolsendrule	5	\TheConferenceShortName	3