

The `mucproc` class*

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1 Introduction

The `mucproc` class provides a document class which allows to use the L^AT_EX document preparation system for contributions to the German “Mensch und Computer 2017” conference. It corresponds to the Word-template offered via the conference’s homepage <http://muc2017.mensch-und-computer.de/> for the year 2017. By offering this document class and an additional usage demonstration file (`mucproc_demo.tex`) we want to offer an easy to use possibility to prepare conference contributions in L^AT_EX.

The goal of this document class is to create PDF-files which look like those created with the Word-template. Most of the contributions are still expected to be typeset in Word, that’s why the `mucproc` class uses the historically grown formatting guidelines which have been created for Word-Users. Therefore the settings of this document class might not always be the typographically best.

2 Usage

A complete example of use can be found on the github repository for this project: <https://github.com/Blubu/mucproc/>

`mucproc` already configures all features needed for the usually required elements of a contribution to the MuC-conference. It loads a bunch of packages to simplify this process. Though the Syntax of the document using this class doesn’t differ from classic L^AT_EX documents.

2.1 Class options

`\documentclass` Start your document by loading the `mucproc` class with an option for the document’s main language. The class will expect either `ngerman` or `english` as main language. Otherwise an error message will be thrown.

*This document corresponds to `mucproc v1.0` MuC-conference, dated 2017/02/22.

For the language settings this class uses the `babel` package and loads `csquotes` for context sensitive quotations. The language option will also be used to configure the bibliography.

The other class option which can be used by authors is `anonymous=truth value`. It activates the anonymous-mode which shall be used for the submission to the review process before a contribution may be accepted. This option disables the author-field for the title and the additional author information as will be described later.

The third type of class option is not meant to be used by the authors themselves. It rather provides a possibility to force a document to be compiled in the final mode and enables some additional features of the document class. The option `forcefinal=truth value` will be used for a recompilation process for the preparation of the final version for the publication process of the proceedings. It can be passed to the class via command line interface and will disable a manually set anonymous-mode.

2.2 Title creation

`\title` The `\title` command behaves identically to most popular document classes. There may be line breaks created with `\\\` or `\newline` inside the argument. Other formatting macros shall not be used, since this argument is also used for the metadata of the final PDF-file.

`\author` The `\author` macro can also be used similar to standard L^AT_EX documents.

`\and` If the document has more than one author, the names shall be separated with `\and`.

`\thanks` The `\thanks` command shall be used to add the corresponding institution. It can be used similar to the standard L^AT_EX definition, though it also can process an optional argument. The optional argument takes a label to reference an institution of another author. This prevents multiple

`\thanksref` mention of institutions. This macro is used to reference the labels set with the `\thanks` command. The implementation of the institution reference is very different from the usual label/ref mechanism. That's why the reference is only defined after the label was set. If the argument of `\thanksref` isn't a known Label an error will occur.

```
\author{John Doe\thanks[inst:1]{Institution 1}\and
      Jane Doe\thanks{Institution 2}\and
      John Doe II\thanksref{inst:1}
```

In contrast to the standard classes, `mucproc` doesn't place the footnotes created by `\thanks` on the bottom of the page, they are positioned directly below the author field of the title.

Other possible entries for the title (e.g. `\date`) are ignored.

`\maketitle` The title has to be created by calling the `\maketitle` command as usual.

2.3 Additional author information

For the final version the authors of contributions have the possibility to add additional information about all authors. For this the `mucproc` class provides the `authoraddendum` environment.

`authoraddendum`

This environment can take up to 2 arguments, one optional containing the path to a corresponding photograph and a mandatory one for the Authors name.

```
\begin{authoraddendum}[john_doe.png]{Doe, John}
Text describing the author.
\end{authoraddendum}
```

If the optional picture argument ist left empty the text will be typeset over the whole `\textwidth`, otherwise there will be a 3cm column on the left side containing the photograph.

3 Implementation

This section contains the source code to the `mucproc.cls`. It will be tried to explain how the class breaks the tasks.

3.0.1 Compatibility mode

This document class intends to be compiled on as many different distributions as possible. Basically this class compiles on releases newer than 2014/05/01 without errors. Nevertheless some specific fallback tests require a the `expl3` package version of 2015/09/07 or newer. A compatibility mode test is implemented first and deactivates all problematic features of the class.

```
1 \RequirePackage{expl3}
2 \ExplSyntaxOn
3 \bool_new:N \g_MUC@compatibility_mode
4 \ifpackagelater{expl3}{2015/09/07}{
5 \bool_gset_false:N \g_MUC@compatibility_mode
6 }{
7 \msg_new:nnn {mucproc}{compatibility}{
8     Your~ LaTeX-Distribution~ seems~ to~ be~ outdated.\\\\\
9     Enabling~ compatibility~ Mode.\\\\\
10    Some~ features~ won't~ be~ available.
11 }
12 \msg_warning:nn {mucproc}{compatibility}
13 \bool_gset_true:N \g_MUC@compatibility_mode
14 }
15
16 \RequirePackage{xparse}
```

The boolean `\g_MUC@compatibility_mode` is set true, if the `expl3` is older than required.

3.1 Class options

The key-value class options are implemented using the `scrbase` package defining a Family called MUC.

```
17 \RequirePackage{scrbase}
18 \DefineFamily{MUC}
19 \DefineFamilyMember{MUC}
20 \bool_new:N \g_MUC@pdfa_bool
```

The Options `anonymous` and `forcefinal` are implemented using the basic `scrbase` mechanism for boolean options:

```
21 \FamilyBoolKey{MUC}{anonymous}{MUC@anonymous}
22 \FamilyBoolKey{MUC}{forcefinal}{MUC@final}
23 \FamilyBoolKey{MUC}{headline}{MUC@headline}
24 \FamilyBoolKey{MUC}{copyrightinfo}{MUC@copyrightinfo}
25 \FamilyBoolKey{MUC}{pagestyle}{MUC@pagestyle}
```

Set up the default boolean values before processing options.

```
26 \MUC@headlinetrue
27 \MUC@copyrightinfotrue
28 \MUC@pagestyletrue
29
30 \FamilyProcessOptions{MUC}
```

The `pagestyle` settings can be disabled if `headline` and `copyrightinfo` are set false.

```
31 \ifMUC@headline
32 \else
33   \ifMUC@copyrightinfo
34   \else
35     \MUC@pagestylefalse
36   \fi
37 \fi
```

If the `forcefinal` option is set, all global options containing the substring “draft” or both of the substrings“final” and “false” are removed to avoid any global draft mode.

```
38 \ifMUC@final
39   \bool_if:NTF \g_MUC@compatibility_mode {
40     \msg_new:nnn {mucproc} {compatibility-final-error} {
41       forcefinal~ is~ not~ possible~ in~ compatibility~ mode.\\\\\
42       Update~ your~ TeX~ distribution~ and~ retry!}
43     \msg_error:nn {mucproc} {compatibility-final-error}
44   }
45   \sys_if_engine_luatex:F {
46     \msg_new:nnn {mucproc} {luatex-required} {
```

```

48      forcefinal~ requires~ LuaLaTeX~ for~ correct~ PDF/A~ output.\\\\\
49      Remove~ forcefinal~ option~ or~ change~ the~ compiler.
50      }
51      \msg_error:nn {mucproc} {luatex-required}
52  }
53  \clist_new:N \l_MUC@globalopts_clist
54
55  \msg_new:nnn {mucproc} {force-final} {
56      forcefinal~ option~ is~ enabled.\\\\\
57      Ignoring~ all~ global~ complementary~ options.}
58  \msg_warning:nn {mucproc} {force-final}
59  \msg_new:nnn {mucproc} {remove-draft}{%
60      forcefinal~ enabled:~ The~ global~ Option~ #1~ is~ ignored,~
61      because~ it~ seems~ to~ activate draft~ mode!}
62
63  \exp_args:Nx \clist_map_inline:nn {\@classoptionslist} {
64      \tl_if_in:nnTF {#1} {draft}
65          {\msg_warning:nnx {mucproc} {remove-draft} {#1}}
66          {\clist_put_right:Nn \l_MUC@globalopts_clist {#1}}
67      \tl_if_in:nnTF {#1} {final}
68          {\tl_if_in:nntF {#1} {false}
69              {\msg_warning:nnx {mucproc} {remove-draft} {#1}}
70              {\clist_put_right:Nn \l_MUC@globalopts_clist {#1}}
71          }
72          {\clist_put_right:Nn \l_MUC@globalopts_clist {#1}}
73  }
74
75
76  \edef\@classoptionslist{\clist_use:Nn \l_MUC@globalopts_clist {,}}
Additionally enable PDF/A-mode and metadata generation and disable
anonymization.
77  \bool_gset_true:N \g_MUC@pdflatex_bool
78  \MUC@anonymousfalse
79  }
80 \fi

```

3.2 Basic Setup

The next step is loading `scrartcl` as base class. According to the formatting rules we pass some options and use the `mucfontsize10pt.clo` file for setting up the font sizes.

```

81 \newcommand*{\@fontsizefilebase}{mucfontsize}
82 \PassOptionsToClass{abstract=true,parskip=full,fontsize=10pt,
83     twoside=semi}{scrartcl}
84 \LoadClass{scrartcl}
85 \setparsizes{0pt}{7pt plus 7 pt}{1em plus 1 fill}
86 \raggedbottom

```

Now the other required packages can be loaded.

```
87 \RequirePackage{graphicx}
88 \RequirePackage{babel}
89 \PassOptionsToPackage{babel}{csquotes}
90 \bbl@frenchspacing
91 \RequirePackage{csquotes}
92
93 \RequirePackage{geometry}% setup margins
94 \geometry{paper=a4paper,top=4.8cm, bottom=5.7cm, left=3.8cm, right=4cm,
95   head=12.045pt, headsep=\dimexpr1cm-12.045pt\relax}
```

3.3 Bibliography setup

The bibliography will be created using `biblatex` with `biber` as backend.

```
96 \PassOptionsToPackage{backend=biber}{biblatex}
97 \PassOptionsToPackage{citestyle=authoryear-comp}{biblatex}
98 \PassOptionsToPackage{bibstyle=apa}{biblatex}
99 \RequirePackage{biblatex}
```

The APA-style requires a Language mapping. It is set for both supported main languages.

```
100 \DeclareLanguageMapping{american}{american-apa}
101 \DeclareLanguageMapping{ngerman}{ngerman-apa}
```

Set up additional Settings to get an equal output, like the Word-version.

```
102 \renewcaptionname{ngerman}{\refname}{Literaturverzeichnis}
103
104 \renewcommand*{\nameyeardelim}{\addcomma\space}
```

3.4 Font Choice

The formatting guidelines request Times New Roman as font. Since on most operating systems it is installed as a system font. We check if it is present and the currently used compiler supports the `fontspec` package.

```
105 \bool_new:N \g_MUC@fontspec_bool
```

These tests basically use the `expl3` methods, but also a fallback for older distributions is implemented to support older distributions. First we implement the compatibility-version.

```
106 \bool_if:NTF \g_MUC@compatibility_mode {
```

To test if `PDFTeX` is used, we check if `\pdfmatch` is defined.

```
107 \expandafter\ifx\csname pdfmatch\endcsname\relax
108   \else
109     \PassOptionsToPackage{utf8}{inputenc}
110     \RequirePackage{inputenc}
111 \fi
112   \bool_gset_false:N \g_MUC@fontspec_bool
```

Next step is the mechanism to check if the used compiler supports `fontspec`.

```
113 }{
114 \sys_if_engine_luatex:TF {
115     \bool_gset_true:N \g_MUC@fontspec_bool
116 }
117 \sys_if_engine_xetex:TF{
118     \bool_gset_true:N \g_MUC@fontspec_bool
119 }
120 \sys_if_engine_pdftex:T {
121     \bool_gset_false:N \g_MUC@fontspec_bool
122 \PassOptionsToPackage{utf8}{inputenc}
123 \RequirePackage{inputenc}
124 }
125 }
126 }
127 }
```

The font fallback is saved in a macro. This prevents the code to be written twice. It is executed when either `FONTSPEC` is not supported or Times New Roman isn't installed.

```
128 \cs_new:Nn \MUC@font_Fallback: {
129 \PassOptionsToPackage{T1}{fontenc}
130 \RequirePackage{fontenc}
131     \IfFileExists{txfonts.sty}{\RequirePackage{txfonts}}{}
132 }
133
134 \if_bool:N \g_MUC@fontspec_bool
135 \RequirePackage{fontspec}
136 \fontspec_font_if_exist:nTF {Times~ New~ Roman}
137     {\setmainfont{Times~ New~ Roman}}
138 {\MUC@font_Fallback:}
139 \else:
140 \MUC@font_Fallback:
141 \fi:
```

3.5 PDF/A-mode and metadata creation

The PDF archiving mode is created using the `pdfx` package. For the correct creation the PDF/A format and the `.xmpdata` file for metadata specific system settings may be required. Therefore this mode is only active if the `forcefinal` mode is enabled.

```
142 \if_bool:N \g_MUC@pdfa_bool
143     \PassOptionsToPackage{a-1b}{pdfx}
144     \RequirePackage{pdfx}
145     \hypersetup{hidelinks}
146     \iow_new:N \MUC@xmpdata_stream
147     \iow_open:Nn \MUC@xmpdata_stream {\jobname.xmpdata}
148     \tl_new:N \g_MUC@xmp_title
```

```

149  \tl_new:N \g_MUC@xmp_author
150
151  \newcommand*{\MUC@passTitleData}{
152    \begingroup
153    \def\newline{}
154    \def\\{}%
155    \xdef\MUC@author{\@author}
156    \xdef\MUC@title{\@title}
157    \cs_set:Npn \and {\exp_not:n {\exp_not:N \sep}}
158    \tl_gset:Nx \g_MUC@xmp_title {\@title}
159    \tl_gset:Nx \g_MUC@xmp_author {\@author}
160    \endgroup
161    \iow_now:Nx \MUC@xmpdata_stream
162    {
163      \exp_not:N \Title{\tl_use:N \g_MUC@xmp_title}
164      ^^J
165      \exp_not:N \Author{\tl_use:N \g_MUC@xmp_author}
166      ^^J
167      \exp_not:N \Org{Mensch~ und~ Computer~ 2017}
168    }
169  }

```

If no PDF/A shall be created, the `\maketitle` data will only be passed to the headline.

```

170 \else:
171   \msg_new:nnn {mucproc} {no-pdfa}{The~ mucproc~ class~ won't~ create~ PDF/A-mode.}
172   \msg_info:nn {mucproc} {no-pdfa}
173   \newcommand*{\MUC@passTitleData}{
174     \begingroup
175     \def\newline{}
176     \def\\{}%
177     \xdef\MUC@author{\@author}
178     \xdef\MUC@title{\@title}
179     \endgroup
180   }
181 \fi:

```

4 Title creation

The title creation process also invokes the mechanism to pass the title data to headline and metadata. It can be initialized calling `\maketitle`.

4.1 Institution footnotes

The MuC formatting guidelines request the institutions typeset similar to footnotes, though they shouldn't be placed at the bottom of the page. The standard footnote mechanism is quite complicated, though we use the L^AT_EX3 clist datatype to create a special mechanism implementing these

“footnotes”. The mechanism is called inside `\maketitle` but created outside of that macro definition to leave the code more readable.

All Arguments of the `\thanks` command will be saved in the comma list called `\l_MUC@thanks_clist`.

```
182 \clist_new:N \l_MUC@thanks_clist
```

The value of the footnote counter has to be expanded when the `\thanks` macro is called. Otherwise the footnotemarks might not match. To achieve this expansion order the `\MUC@thanks:nn` command takes the counter value as first argument and the institution name as second.

```
183 \cs_set:Nn \MUC@thanks:nn {
184     \clist_gput_right:Nn \l_MUC@thanks_clist
185     {{\#2}\def\@thefnmark{\#1}\@makefnmark}
186 }
```

Inside the real `\thanks` macro the first argument will be expanded directly. Additionally `\MUC@thanks` sets its own first (optional) argument as a label for the property list `\g_MUC@InstRef_prop`. This allows the footnote counter value to be accessed through the label.

```
187 \bool_if:NTF \g_MUC@compatibility_mode
188 {\NewDocumentCommand{\MUC@thanks}{om}{
189     \footnotemark%
190     \exp_args:Nx \MUC@thanks:nn {\thefootnote}{\#2}
191 }
192 }{
193 \NewDocumentCommand{\MUC@thanks}{om}{
194     \footnotemark%
195     \IfNoValueF{\#1}{
196         \prop_if_exist:NF \g_MUC@InstRef_prop {
197             \prop_new:N \g_MUC@InstRef_prop
198             \prop_put:Nnx \g_MUC@InstRef_prop {\#1} {\thefootnote}
199         }
200         \exp_args:Nx \MUC@thanks:nn {\thefootnote}{\#2}
201     }
202 }}
```

The mechanism seems to work like the typical L^AT_EX label/ref though no backref is supported. To inform the user about this an error will be thrown when a label is accessed which does not exist.

```
203 \bool_if:NTF \g_MUC@compatibility_mode {
204 \msg_new:nnn {mucproc} {thanksref-unavailable} {
205     Compatibilty~ mode~ enabled.\\\\ \
206     The~ institution~ reference~ mechanism~ is~ not available.\\\\ \
207     Update~ Your~ TeX~ distribution~ to~ be~ able~
208     to~ use~ this~ feature.
209 }
210 \msg_warning:nn {mucproc} {thanksref-unavailable}
211     \newcommand{\MUC@thanksref}[1]{\$\dagger\$}
212 }{
```

```

213 \msg_new:nnn {mucproc} {thanks-label-missing} {
214     No~ institute~ labeled~ '#1'.\\\ \
215     Add~ a~ label~ using~ the~ optional~ argument~
216         of~ the~ \thanks~ command.
217 }
218
219 \NewDocumentCommand\MUC@thanksref{m}{
220     \prop_if_in:NnTF \g_MUC@InstRef_prop {#1} {
221         \def\@thefnmark{\prop_item:Nn \g_MUC@InstRef_prop {#1}}%
222         \makefnmark
223     }
224     {\msg_error:nn {mucproc} {thanks-label-missing}}
225 }
226 }
```

After the title has been set, the institutional notes shall be typeset.

```

227 \newcommand*\typeset@MUC@thanks {
228     \clist_use:Nn \l_MUC@thanks_clist {\rule{0pt}{0pt}\vphantom{A}}
```

4.2 Typesetting the title

As written before, `\maketitle` has to execute additional jobs. Since the title fields also can contain other macros or even line breaks, the expansion process has to be controlled carefully.

```

229 \renewcommand*\maketitle{%
230 \begingroup
```

Before passing the data to the headlines or metadata using the earlier defined `\MUC@passTitleData` we need some redefinitions for the commands, which can be used inside the title fields.

```

231 \DeclareExpandableDocumentCommand\thanks{}{}%
232 \def\thanksref##1{}%
233 \def\and{\unskip,\ignorespaces}%
234 \MUC@passTitleData
```

Not the actual title creation begins redefining the user macros to those prepared for that purpose.

```

235 \let\titlepage@restore\relax
236 \renewcommand*\thefootnote{\@arabic\c@footnote}
237 \let\thanks\MUC@thanks
238 \let\thanksref\MUC@thanksref
```

Now only the title fields have to be typeset.

```

239 \global\@topnum=\z@%
240 \setparsizes{\z@}{\z@}{\z@\@plus 1fil}\par@updaterelative
241 \null
242 \vskip 41pt
243 {\usekomafont{title}{\Huge \@title \par}}%
244 {\ifx\@subtitle\@empty\else\vskip .5em\usekomafont{subtitle}%
245 \Large\@subtitle\par\fi}%

```

```

246     \vskip 7pt
247 {%
248 \usekomafont{author}{%
249 \lineskip .5em%
250 \author
251 \par
252 }%
253 }%
254 \par
255 \vskip 8pt
256 \bool_if:NTF \g_MUC@compatibility_mode
257   {\thispagestyle{empty}}
258   {\thispagestyle{MUC@titlepagestyle}}
259 \typeset@MUC@thanks
260 \par
261 \vspace{8pt}
262 \endgroup
263 \setcounter{footnote}{0}%
264 \global\let\and\relax
265 \global\let\thanksref\relax
266 }

```

4.3 Anonymization and additional author information

The anonymization is realized checking the setting using the corresponding if-expression. The `\author` information to the language dependent meaning of `\MUCanonymousauthor`.

```

267 \newcaptionname{lngerman}{\MUCanonymousauthor}{Anonymisierte Fassung}
268 \newcaptionname{english}{\MUCanonymousauthor}{anonymous version}
269 \ifMUC@anonymous
270   \def\author{\MUCanonymousauthor}
271   \def\author#1\relax

```

The `authoraddendum` environment shall create no output, if the anonymous mode is active.

```

272   \RequirePackage{comment}
273   \excludecomment{authoraddendum}
274 \else

```

`authoraddendum` The Implementation works via the typical xparse mechanisms.

```

275   \NewDocumentEnvironment{authoraddendum}{d<>om}{%
276     \par
277     \IfNoValueTF{#2}{%
278       {\usekomafont{authoraddendum}{#3}\par\medskip
279     }{%
280       \begin{minipage}[t]{3cm}
281         \vspace{0pt}
282         \IfNoValueTF{#1}{%
283           \includegraphics[width=\linewidth]{#2}

```

```

284     }{
285         \includegraphics[#1]{#2}
286     }
287     \end{minipage}\hspace{.5cm}%
288     \begin{minipage}[t]{\dimexpr\linewidth-3.5cm\relax}
289     \vspace{0pt}
290     {\usekomafont{authoraddendum}#3}\par\medskip%
291     }
292     \usekomafont{authoraddendum}
293     }{
294     \IfNoValueF{#2}{\end{minipage}}
295     \par
296     }
297 \fi

```

4.4 Visible adjustment of sizes and spacing

To match the Word template we have to adjust a bunch of spacing settings as well as font sizes. The easiest way to achieve this is using the KOMA-Script mechanisms.

4.5 Structure Settings

Word indents the section headings independent from the width of the section number. To achieve this a macro called `\MUC@sectionnumberbox` is created and all section formats are redefined. In compatibility mode these settings will be ignored.

```

298 \reverse_if:N \if_bool:N \g_MUC@compatibility_mode
299 \newcommand*{\MUC@sectionnumberbox}[1]{\makebox[28bp][l]{#1\autodot}}
300 \renewcommand*{\sectionformat}{%
301     \MUC@sectionnumberbox{\thesection}}
302 \renewcommand*{\subsectionformat}{%
303     \MUC@sectionnumberbox{\thesubsection}}
304 \renewcommand*{\subsubsectionformat}{%
305     \MUC@sectionnumberbox{\thesubsubsection}}

```

The spacing around the headings also has to be adjusted:

```

306 \RedeclareSectionCommand[afterskip=1.5ex plus .2ex,%
307     beforeskip=-3.6ex plus -1ex minus -.2ex]{section}
308 \RedeclareSectionCommand[afterskip=.5ex plus .2ex,%
309     beforeskip=-1ex plus -1ex minus -.2ex]{subsection}
310 \RedeclareSectionCommand[afterskip=.5ex plus .2ex,%
311     beforeskip=-1ex plus -1ex minus -.2ex]{subsubsection}
312 \RedeclareSectionCommand[afterskip=1em,%
313     beforeskip=1ex plus 1ex minus .2ex]{paragraph}
314 \RedeclareSectionCommand[afterskip=1em,%
315     beforeskip=1ex plus 1ex minus .2ex]{ subparagraph}
316 \fi:
317 \ExplSyntaxOff

```

The font settings will be done together with all other font settings in the next subsection.

4.6 Font Settings

Adjusting the font settings to match the Word version:

```
318 \setkomafont{disposition}{}  
319 \setkomafont{title}{}  
320 \setkomafont{author}{\large}  
321 \setkomafont{section}{\LARGE}  
322 \setkomafont{subsection}{\Large}  
323 \setkomafont{caption}{\footnotesize\itshape}  
324 \setkomafont{captionlabel}{\usekomafont{caption}}  
325 \newkomafont{abstractcontent}{\small}  
326 \newkomafont{abstract}{\normalsize\bfseries}  
327 \newkomafont{authoraddendum}{\small}
```

4.7 Abstract

The `abstract` environment is redefined to match the Word version.

```
328 \renewenvironment{abstract}{%  
329     \setparsizes{0pt}{4pt}{0pt plus 1 fill}{%  
330     \usekomafont{abstract}{%  
331     \abstractname}\par%  
332     \usekomafont{abstractcontent}{}}
```

4.8 Pagestyle

The demo document shows a headline containing author and document title. To achieve this that information was passed inside the `\maketitle` macro and saved in the `\MUC@author` and `\MUC@title` macros. There is also a possibility to set a copyright-information box similar to the Word template.

```
333 \ifMUC@pagestyle  
334 \PassOptionsToPackage{headsepline}{scrlayer-scrpage}  
335     \RequirePackage{scrlayer-scrpage}  
336     \ifMUC@copyrightinfo
```

Nowadays it is possible to write the complete content for the scrlayers directly inside the definition. To support older distributions as well the content is wrapped into a box. The most absolute length values have been extracted from different measurements to match the Word version.

```
337     \newsavebox{\MUC@copyrightbox}  
338     \begin{lrbox}{\MUC@copyrightbox}  
339     \setlength{\fboxrule}{.7bp}{%  
340     \setlength{\fboxsep}{6.5pt}{%  
341     \fbox{\hspace*{.8pt}\parbox[t]{[\dimexpr2cm-2\fboxsep
```

```

342     -2\fboxrule\relax] [t]{%
343         \dimexpr\textwidth-2\fboxsep-2\fboxrule%
344         -1.6pt\relax}{%
345     Platzhalter für DOI und ggf. Copyright Text.
346     (Bitte nicht entfernen).\par
347     \vspace{7pt}
348     Name, Vorname (2017): Titel.%  

349     Tagungsband Mensch und Computer 2017.  

350     Gesellschaft für Informatik.%  

351     DOI: xxxxxx}%
352 }
353 \end{lrbox}
354 \DeclareNewLayer[align=tl,area={\dimexpr 1in
355     + \hoffset + \oddsidemargin\relax}{%
356     \dimexpr\paperheight-3.9cm\relax}{\textwidth}{2cm},
357     contents={\usebox{\MUC@copyrightbox}}]{copyright}
358 \DeclareNewPageStyleByLayers{MUC@titlepagestyle}{copyright}
359 \else
360 \DeclareNewPageStyleAlias{MUC@titlepagestyle}{empty}
361 \fi
362 \clearpairofpagestyles
363 \ifMUC@headline
364     \lohead{\MUC@title}
365     \rehead{\csname MUC@author\endcsname}
366 \fi
367 \setkomafont{pagehead}{\normalfont}
368 \setkomafont{pagefoot}{}
369 \fi

```