

# The **a4wolke** bundle\*

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## 1 Introduction

The **a4wolke** bundle provides L<sup>A</sup>T<sub>E</sub>X classes for creating documents with a layout similar to the one used in the A4Cloud project. The latest version can be obtained from

<http://github.com/ZjMNZHgG5jMXw/a4wolke> .

## 2 Usage

This template can be found in `a4template.tex`. The document declaration starts with defining the meta data.

```
1 \documentclass{a4wolke}
2 \usepackage[scaled=0.92]{helvet}
3 \meta{ title           = Document title
4   , number            = MS:X-1.1
5   , workpackage       = WP:X-1
6   , version           = 0.1
7   , organisation      = Partner
8   , dissemination    = CO
9   , contractdate      = dd/mm/yyyy
10  , delivery           = dd/mm/yyyy
11  , status             = template
12 }
13 }
```

An editor can be declared by using the macro `\editor`. More editors can be added by repeatedly declaring one editor.

```
14 \editor{ name          = editor's name
15   , affiliation        = editor's affiliation
16 }
```

A contributor can be declared by using the macro `\contributor`. More contributors can be added by repeatedly declaring one contributor.

```
17 \contributor{ name      = author's name
18   , affiliation         = author's affiliation
19 }
```

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\*This document corresponds to **a4wolke** v1.2, dated 2014/07/28.

A reviewer can be declared by using the macro `\reviewer`. More reviewers can be added by repeatedly declaring one reviewer.

```
20 \reviewer{ name          = reviewer's name
21           , affiliation = reviewer's affiliation
22           }
```

A revision can be declared by using the macro `\revision`. More revisions can be added by repeatedly declaring one revision.

```
23 \revision{ number       = 0.1
24           , date        = dd/mm/yyyy
25           , author       = author
26           , affiliation = affiliation
27           , change       = change description.
28 }
```

The document body starts with inserting the lists and tables of contributors, reviewers, revisions, and contents.

```
29 \begin{document}
30 \maketitle
31 \section*{Executive Summary}
32 \clearpage
33 \tableofcontents
```

The rest of the document may be written as any other  $\text{\LaTeX}$  article.

```
34 \section{Introduction}
35 \begin{table}
36   \centering
37   \begin{a4tabular}{|r|l|}
38     fun & run \\
39     run & fun \\
40     fun & run \\ \hline
41   \end{a4tabular}
42   \caption{fun & run.}
43 \end{table}
44 \end{document}
45 \end{template}
```

## 3 Implementation

### 3.1 Class options and dependencies

Class options are neither parsed nor passed to the underlying `scrartcl` class. All macros are derived from the standard `scrartcl` class.

```
46 (*class)
47 \ProcessOptions\relax
48 \LoadClass{scrartcl}
49 \RequirePackage{scrpage2}
50 \RequirePackage{graphicx}
51 \RequirePackage{xkeyval}
52 \RequirePackage{datatool}
53 \DTLnewdb{editor}%
54 \DTLaddcolumn{editor}{name}%
55 \DTLaddcolumn{editor}{affil}%
56 \DTLnewdb{contrib}%
```

```

57 \DTLaddcolumn{contrib}{name}%
58 \DTLaddcolumn{contrib}{affil}%
59 \DTLnewdb{review}%
60 \DTLaddcolumn{review}{name}%
61 \DTLaddcolumn{review}{affil}%
62 \DTLnewdb{revision}%
63 \DTLaddcolumn{revision}{number}%
64 \DTLaddcolumn{revision}{date}%
65 \DTLaddcolumn{revision}{author}%
66 \DTLaddcolumn{revision}{affil}%
67 \DTLaddcolumn{revision}{change}%
68 \RequirePackage{colortbl}
69 \RequirePackage{tabularx}
70 \RequirePackage{longtable}
71 \RequirePackage[table]{xcolor}
72 \RequirePackage{lastpage}
73 \renewcommand\familydefault\sfdefault

```

### 3.2 Project design

Arial, 10 (normal)  
 Arial, 8 (footer)  
 RGB: 45, 170, 225 (frame, title page rulers)  
 RGB: 180, 207, 225 (alternative filling)  
 RGB: 166, 166, 166 (footer)

```

74 \definecolor{cloudblueframe}{rgb}{0.176,0.667,0.882}%
75 \definecolor{cloudbluefill}{rgb}{0.706,0.812,0.882}%
76 \definecolor{cloudgreyfoot}{rgb}{0.651,0.651,0.651}%
77 \arrayrulecolor{cloudblueframe}%
78 \renewcommand\arraystretch{1.1}%
79 \clearscrheadings%
80 \renewcommand*\headfont{\normalfont\smallskip}
81 \renewcommand*\footfont{\normalfont\scriptsize\color{cloudgreyfoot}}
82 \setheadsepline{0.5pt}[\color{cloudblueframe}\hrulefill]
83 \lohead{\wol@meta@title}%
84 \lehead{\wol@meta@title}%
85 \lefoot{FP7-ICT-2011-8-317550-A4CLOUD}%
86 \lofoot{FP7-ICT-2011-8-317550-A4CLOUD}%
87 \refoot{Page~\textbf{\thepage}~of~\textbf{\pageref{LastPage}}}%
88 \rofoot{Page~\textbf{\thepage}~of~\textbf{\pageref{LastPage}}}%
89 \pagestyle{scrheadings}%
90 \defpagestyle{titlepage}{%
91   {}{}{%
92     \IfFileExists{A4cloud.pdf}%
93       {\includegraphics[scale=0.6]{A4cloud}}%
94       {[logo] mail stefan.berthold@kau.se for the logo image file}%
95     \hfill\medskip%
96   }%
97 }{%
98   {}{}{\parbox[b]{0.75\textwidth}{\scriptsize\color{cloudgreyfoot}%
99     A4Cloud\\%
100     \underline{www.a4cloud.eu}\\%

```

```

101     Accountability For Cloud and Other Future Internet Services\\[\\baselineskip]%
102     FP7-ICT-2011-8-317550-A4CLOUD%
103 }\\hfill%
104 \\parbox[b]{3cm}{\\raggedleft%
105     \\IfFileExists{seventh_framework_programme.jpg}%
106     {\\includegraphics[width=28mm]{seventh_framework_programme}}%
107     {[logo] mail stefan.berthold@kau.se for the logo image file}}%
108 }%
109 }

```

### 3.3 Front matter

`\\meta` `{\\langle meta data \\rangle}` defines the document's meta data.

```

110 \\define@cmdkeys[wol]{meta}[wol@meta@]%
111 { title
112   , number
113   , workpackage
114   , version
115   , organisation
116   , dissemination
117   , contractdate
118   , delivery
119   , status
120 }
121 \\newcommand\\meta[1]{\\setkeys[wol]{meta}{#1}}

```

`\\wol@maketitle` preserves the original definition of the title page.

```

122 \\let\\wol@maketitle=\\maketitle

```

`\\maketitle` creates the title page.

```

123 \\renewcommand\\maketitle{\\par\\noindent%
124   \\newlength{\\wol@headheight}\\setlength{\\wol@headheight}{\\headheight}%
125   \\setlength{\\headheight}{1.2in}%
126   \\thispagestyle{titlepage}%
127   \\huge\\wol@meta@title\\medskip\\par\\noindent\\normalsize%
128   \\color{cloudblueframe}\\rule{\\textwidth}{0.5pt}\\color{black}\\bigskip\\par\\noindent%
129   \\bfseries Deliverable Number: \\normalfont\\wol@meta@number\\smallskip\\par\\noindent%
130   \\bfseries Work Package: \\normalfont\\wol@meta@workpackage\\smallskip\\par\\noindent%
131   \\bfseries Version: \\normalfont\\wol@meta@version\\smallskip\\par\\noindent%
132   \\bfseries Deliverable Lead Organisation: \\normalfont\\wol@meta@organisation\\smallskip\\par\\noindent%
133   \\bfseries Dissemination Level: \\normalfont\\wol@meta@dissemination\\smallskip\\par\\noindent%
134   \\bfseries Contractual Date of Delivery (release): \\normalfont\\wol@meta@contractdate\\smallskip\\par\\noindent%
135   \\bfseries Date of Delivery: \\normalfont\\wol@meta@delivery\\smallskip\\par\\noindent%
136   \\bfseries Status: \\normalfont\\wol@meta@status\\smallskip\\par\\noindent%
137   \\color{cloudblueframe}\\rule{\\textwidth}{0.5pt}\\color{black}\\bigskip\\bigskip\\par\\noindent%
138   \\listofeditors\\bigskip\\par\\noindent%
139   \\listofcontributors\\bigskip\\par\\noindent%
140   \\listofreviewers%
141   \\clearpage%
142   \\vspace*{\\stretch{1}}%
143   \\par\\noindent\\bfseries Revision table\\normalfont\\medskip\\par\\noindent%
144   \\tableofrevisions%
145   \\vspace*{\\stretch{3}}%

```

```

146 \setlength{\headheight}{\wol@headheight}%
147 \clearpage%
148 }

\wol@tableofcontents preserves the original definition of the table of contents.
149 \let\wol@tableofcontents=\tableofcontents

\tableofcontents prints the table of contents and finishes the page.
150 \renewcommand\tableofcontents{\wol@tableofcontents\clearpage}

\editor {<editor's information>} may be used multiple times and once for each editor.
151 \define@key[wol]{editor}{name}{%
152 \DTLnewdbentry{editor}{name}{#1}}
153 \define@key[wol]{editor}{affiliation}{%
154 \DTLnewdbentry{editor}{affil}{#1}}
155 \newcommand\editor[1]{%
156 \DTLnewrow{editor}%
157 \setkeys[wol]{editor}{#1}%
158 }

\listofeditors creates the list of editors.
159 \newcommand\listofeditors{%
160 \noindent%
161 \begin{tabularx}{\textwidth}{|X|}%
162 \rowcolor{cloudblueframe}
163 Editor\\ \hline%
164 \DTLforeach*{editor}%
165 {\name=name, \affil=affil}%
166 {\DTLiffirstrow{\name{} (\affil)}}{\name{} (\affil)}}%
167 \\ \hline%
168 \end{tabularx}\par%
169 }

\contributor {<contributor's information>} may be used multiple times and once for each contributor.
170 \define@key[wol]{contrib}{name}{%
171 \DTLnewdbentry{contrib}{name}{#1}}
172 \define@key[wol]{contrib}{affiliation}{%
173 \DTLnewdbentry{contrib}{affil}{#1}}
174 \newcommand\contributor[1]{%
175 \DTLnewrow{contrib}%
176 \setkeys[wol]{contrib}{#1}%
177 }

\listofcontributors creates the list of contributors.
178 \newcommand\listofcontributors{%
179 \noindent%
180 \begin{tabularx}{\textwidth}{|X|}%
181 \rowcolor{cloudblueframe}
182 Contributors\\ \hline%
183 \DTLforeach*{contrib}%
184 {\name=name, \affil=affil}%
185 {\DTLiffirstrow{\name{} (\affil)}}{\name{} (\affil)}}%

```

```

186     \\hline%
187 \end{tabularx}\par%
188 }

```

`\reviewer`  $\{\langle review's information \rangle\}$  may be used multiple times and once for each reviewer.

```

189 \define@key[wol]{review}{name}{%
190   \DTLnewdbentry{review}{name}{#1}}
191 \define@key[wol]{review}{affiliation}{%
192   \DTLnewdbentry{review}{affil}{#1}}
193 \newcommand\reviewer[1]{%
194   \DTLnewrow{review}%
195   \setkeys[wol]{review}{#1}%
196 }

```

`\listofreviewers` creates the list to reviewers.

```

197 \newcommand\listofreviewers{%
198   \noindent%
199   \begin{tabularx}{\textwidth}{|X|}%
200     \rowcolor{cloudblueframe}
201     Reviewers\\hline%
202     \DTLforeach*{review}%
203       {\name=name, \affil=affil}%
204       {\DTLiffirstrow{\name{} (\affil)}{\name{} (\affil)}}%
205     \\hline%
206   \end{tabularx}\par%
207 }

```

`\revision`  $\{\langle revision information \rangle\}$  may be used multiple times and once for each revision.

```

208 \define@key[wol]{revision}{number}{%
209   \DTLnewdbentry{revision}{number}{#1}}
210 \define@key[wol]{revision}{date}{%
211   \DTLnewdbentry{revision}{date}{#1}}
212 \define@key[wol]{revision}{author}{%
213   \DTLnewdbentry{revision}{author}{#1}}
214 \define@key[wol]{revision}{affiliation}{%
215   \DTLnewdbentry{revision}{affil}{#1}}
216 \define@key[wol]{revision}{change}{%
217   \DTLnewdbentry{revision}{change}{#1}}
218 \newcommand\revision[1]{%
219   \DTLnewrow{revision}%
220   \setkeys[wol]{revision}{#1}%
221 }

```

`\tableofrevisions` creates the table of revisions.

```

222 \newcommand\tableofrevisions{%
223   \noindent%
224   \begin{longtable}{|p{34pt}|p{60pt}|p{113.81pt}|p{160.44559pt}|}%
225     \rowcolor{cloudblueframe}
226     Version & Date & Author & Change Description%
227     \DTLforeach*{revision}%
228       {\num=number, \dat=date, \auth=author, \affil=affil, \change=change}%
229       {\hline\DTLifoddrow{\rowcolor{white}}{\rowcolor{cloudbluefill}}}%
230       \num & \dat & \auth{} (\affil) & \change}%
231     \hline%

```

```

232 \end{longtable}\addtocounter{table}{-1}\par%
233 }

```

### 3.4 Main matter

```

a4tabular {⟨column defs⟩}
234 \newenvironment{a4tabular}[1]{%
235     \rowcolors{2}{cloudbluefill}{}%
236     \begin{tabular}{#1}%
237     \rowcolor{cloudblueframe}%
238     }%
239     {\end{tabular}}
240 ⟨/class⟩

```